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HOW SHOULD COMPETITION POLICY HELP SAVE THE PLANET?

31 JANUARY 2024



The past two years have seen a number of competition authorities publishing guidance on how sustainability agreements are to be assessed under competition rules.¹ The key challenge that authorities have grappled with is how to reconcile the urgent need to address negative environmental externalities with their core mandate of ensuring markets deliver for consumers. In this article, we argue that supporting action to tackle climate change and biodiversity loss through competition policy does not require a departure from this core mandate. Rather, it is fully in line with making markets efficient – even if some of the measures result in higher prices and reduced output. Competition policy should not shy away from letting consumers pay the true costs of their consumption if this means that markets can then operate within sustainable boundaries.

Competition authorities have a mandate to protect effective competition in markets. This mandate is motivated on the basis that well-functioning markets enhance consumer welfare and lead to an efficient allocation of resources.² When competition does not work well, society suffers because resources are wasted: inefficient markets lead to a situation where consumers are collectively worse off. In this article we argue that a market in which consumers are depleting the earth's vital resources is not efficient, it is failing.

At the core of our argument is the understanding that competition works by bringing market prices into line with the true costs of production and consumption. Seen through the conventional lens of competition policy, we tend to think about the role of competition as one of lowering prices, limiting market power so that firms can't raise their prices above costs and extract excessive profits. And that is indeed one way in which prices can get out of line with the true costs of production and result in inefficiency. But another cause of inefficiency in markets is when prices are too low, below the true costs of production and consumption. Effective economic regulation – including competition policy – should therefore seek to ensure that neither happens.

This does not require fundamental changes to competition rules. Rather, simply the recognition that prices should reflect the true costs of production in order to be efficient and that prices that do not reflect these costs – be they too high or too low – can be harmful. Saving the planet should not be seen as a special case deserving of an exception to existing competition policy rules – it should be seen as an exemplary case of how competition policy can help drive the economy to more efficient outcomes.

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¹ See for example, guidelines issued by the <u>European Commission</u>, the <u>UK Competition and Markets Authority</u> and Austria's RWB

² See for example, the EC Guidelines on the application of Article 101(3) TFEU, which state that '[t]he aim of the Community competition rules is to protect competition on the market as a means of enhancing consumer welfare and of ensuring an efficient allocation of resources' (European Commission (2004a), Guidelines on the application of Article 101(3) TFEU (formerly Article 81(3) TEC); para. 31).

A parallel can be drawn with the recently introduced Foreign Subsidies Regulation at EU level, which involves "assessing the extent to which a foreign subsidy can improve the competitive position of an undertaking and where, in doing so, that foreign subsidy actually or potentially negatively affects competition in the internal market". This is no so different to the hidden costs of using up unpriced environmental resources: something that may result in lower prices, but that nonetheless distorts competition.

Pursuing the wrong goal

Recognising the need to step up efforts to address the numerous environmental crises we are currently facing, competition authorities across Europe and beyond have responded by issuing guidelines to businesses explaining how they may cooperate with competitors to curb their environmental impacts (so-called "sustainability agreements") without transgressing competition law. Debates around these agreements often portray competition authorities as facing a trade-off, with the agreements causing anticompetitive harm to consumers that needs to be offset by sustainability benefits. This perspective creates two problems.

Firstly, this approach does not get to the heart of the problem. By requiring consumers to be compensated for any costs incurring from a sustainability agreement, competition authorities are tying their own hands. They fail to recognise that the problems are inflicted by producers and consumers in these markets on others, often outside the market. This is epitomised in the context of climate change, where the impact of emitting carbon is felt globally and most of the worst effects are suffered by those far away from European consumers, but it also applies to other forms of environmental harm.³

Secondly, the pursuit of 'compensatory' efficiency gains from such agreements may encourage competition authorities to focus too narrowly on what we call *mitigative* agreements that seek to improve sustainability in a way that has minimal cost on consumers – for example through investing in the development of new technologies or production processes. These types of agreement have a number of desirable features, but there may also be markets where no technological 'magic bullets' exist and where a *preventative* approach that reduces consumption is the most effective or indeed *only* solution to curbing our environmental impact.

Efficient markets reflect the true costs of consumption

Rather than focusing on compensatory benefits, competition authorities should recognise environmental externalities as a problem of market inefficiency. By consuming at a rate at which resources are harvested faster than they are able to regenerate, or at which waste is emitted faster than the natural environment can break down and neutralise it, we are depreciating our planetary stock of natural capital⁴ and compromising its ability to continue

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³ For instance where the pesticide exposure is suffered by cotton farmers located in Asia but inflicted by European consumers

– see https://competition-policy.ec.europa.eu/system/files/2023-07/2023 revised horizontal guidelines en.pdf, para.585.

⁴ This natural capital includes soils, air, water, flora and fauna.

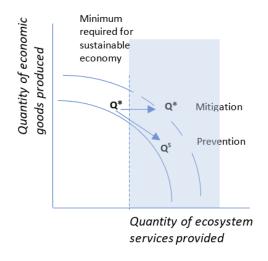
providing vital ecosystem services upon which we depend.⁵ Ecosystem services contribute to human wealth and wellbeing; some estimate that ecosystem services are worth twice as much to the global economy as the world's Gross Domestic Product.⁶ By depreciating the natural world, we are making ourselves worse off.

For markets to operate efficiently, the hidden costs of consumption need to be factored into consumers' purchasing decisions as well as the tangible costs of production. Were this the case, then effective competition would erode prices towards the "true costs" of production, which include not only the material inputs, labour and overheads, but also any environmental and/or social costs that are borne more widely. Only then will price signals regulate consumption effectively, allowing markets to deliver the optimal level of production and consumption that maximises social welfare.

How to achieve efficient markets

We can think about how we can make markets more efficient by considering the trade-off between the consumption of material goods and the preservation of ecosystem services as a Production Possibility Frontier ("PPF") (Figure 1). The PPF is a curve that illustrates all possible combinations of these goods and services that society can provide, given the current level of technology. A minimum amount of natural capital must be preserved in order for the system to be sustainable – this is the point at which the Earth's rate of regeneration and absorption equals the rate at which resources are harvested or waste is emitted. In the chart below, these sustainable levels of natural capital are shown as the shaded zone.





⁵ Ecosystem services are free services the natural environment provides to us, such as carbon sequestration. For more on this see Dasgupta, P. (2021), The Economics of Biodiversity: The Dasgupta Review, p.66; https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/962785/The_Economics_of_Biodiversity_The_Dasgupta_Review_Full_Report.pdf accessed 6 December 2022.

⁶ Boston Consulting Group (2021), https://www.bcg.com/publications/2021/biodiversity-loss-business-implications-responses

Source: Frontier Economics

As the chart illustrates, there are two ways in which society – starting from an unsustainable position on the chart (Q^*) – can move into the sustainable zone.

Mitigation

The first strategy is *mitigative*; by rationalising and innovating, we can change production processes to make them less damaging, pushing the PPF outwards. Mitigation is necessary if we want to maintain our current level of consumption of material goods (Q*), while at the same time achieving sustainable markets.

Examples of this include agreements to source only sustainably-produced raw materials, phase out plastics in food packaging and coordinate on logistics in order to reduce transport distances, amongst others.⁷ Recently, the Dutch Authority for Competition and Markets approved an agreement between Shell and TotalEnergies to collaborate on the storage of CO2 in empty natural-gas fields in the North Sea, which would mitigate emissions caused by energy generation.⁸

These types of agreement can be a win-win solution for society as a whole, but such approaches also carry costs:

- These may chiefly arise from the direct cost of implementing the measure, which might include research and development or the costs of sourcing a more expensive input which meets certain sustainability criteria (e.g eliminating palm oil from supply chains). Businesses that enter into a sustainability agreement of this nature will likely seek to recover these costs by reflecting them in their prices.
- Price rises may result in foregone purchases by consumers who find the "improved" product too expensive. The extent to which this arises depends on the price-elasticity of demand, or in other words, how responsive consumers are to changes in prices. The more *elastic* the demand, the higher the loss in terms of foregone purchases.

Because they involve these costs, in practice few mitigative agreements are likely to maintain consumption exactly at current levels (Q* in the illustrative chart above), even if they shift out the PPF. Nonetheless, they may reduce consumption less than the second type of strategy.

Prevention

The second way of shifting the economy into the sustainable zone is *preventative*: by limiting the quantities of a product or service produced, we can directly prevent damage to the environment and the depreciation of natural capital. Such agreements could, in the extreme, even take the form of a simple price-fixing arrangement in which producers agree to make

⁷ These are all examples which were offered by respondents to the Commission's 2020 call for contributions on this topic.

⁸ https://www.acm.nl/en/publications/acm-shell-and-totalenergies-can-collaborate-storage-co2-empty-north-sea-gas-fields

their customers pay them more to consume less. This means moving down along the existing PPF to a lower level of consumption within the shaded area (from Q* to Q\$). The price or quantity would be calibrated to limit consumption of the product or service to the *sustainable level*, the level at which resource use and emissions are equal to the Earth's rate of regeneration and absorption. This may be lower or indeed higher than the monopoly price and quantity.

This option may be more controversial for competition authorities, who may struggle to see such an agreement as producing the types of efficiency gains that they tend to require for granting exemption from competition rules. Nonetheless, there is precedent for competition authorities condoning some agreements that are essentially preventative in nature: for example in 1999, the European Commission approved an agreement between Belgian domestic washing-machine manufacturers to phase out sales of more emissions-intensive models,9 equivalent to an agreement to reduce choice (targeted at the most environmentally-damaging part of the market).

Preventative approaches carry a cost to consumers in terms of the increase in prices and the foregone purchases which consumers could have made absent the measure. The magnitude of this cost is determined by:

- the reduction in quantity produced of the good or service which is necessary to achieve in order to reach the efficient market outcome; and
- again, the price elasticity of demand. Markets with inelastic demand are those where consumers' need or want for the product or service is greatest and find it most difficult to reduce consumption. Consequently, measures to ration consumption in these markets will have more a significant cost for consumers.

Preventative measures may also be costly in terms of so-called *dynamic* efficiency. One of the main benefits of effective competition, particularly in fast-moving markets, is the incentives that it can create for firms to innovate. But directly fixing prices or output in such industries could actively suppress businesses' incentives to innovate. After all, why would a firm invest in a greener production process or an improved product if there is an agreement in place that blocks it from increasing its sales and thereby reaping the rewards of this investment?

Which is best?

The most appropriate strategy in any given market will be determined by the relative costs of each. Economic logic provides us with two rules of thumb which might guide us on which strategy is likely to be best under different scenarios:

Price elasticity of demand. As identified above, this plays a key role in determining the costs under each strategy. If demand is elastic, the costs of a preventative strategy are likely to be lower because it would only require a small price increase to achieve a large

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⁹ Case IV.F.1/36.718. CECED; European Commission.

reduction in demand for the product. Conversely, if demand is inelastic, then a *mitigative* strategy may be more cost-effective.

■ The potential for innovation and changing production processes. Secondly, the potential to innovate or modify production processes is likely to be the binding constraint on the choice between strategies. If a lot of costly R&D would be required to shift the PPF out in a given market, then a preventative strategy might be the best approach, especially if consumer demand for the product is relatively elastic. By contrast, in fast-moving markets with plenty of scope for innovation and technological change, a mitigative approach might be more cost effective and would avoid dampening dynamic efficiency.

Revising the rules: where competition authorities should focus

Competition authorities should abandon their focus on compensating consumers when considering proposed sustainability agreements. Instead, their review should focus on two questions:

- first, whether the proposed agreement will increase market efficiency once all the true costs of production and consumption – including the environmental and/or social costs – are taken into account; and
- second, whether a proposed agreement is mitigative or preventative in nature, and whether this is the right approach given the characteristics of the market they are considering.

When presented with a proposed agreement that is mitigative in nature, competition authorities should pay close attention to the changes in production process being proposed, including the costs of any investments required, the likelihood of these measures proving successful in boosting the sustainability of the market (compared more direct preventative measures) and the need for the businesses concerned to coordinate or pool their resources in these investments.

By contrast, when presented with an agreement that is preventative in nature, competition authorities should pay especially close attention to the scope for innovation in the market in question and consider whether there is scope for an alternative mitigative agreement that would be better – because it would be more cost effective from a consumer perspective to invest in greener production processes than to reduce output and/or because of it would safeguard incentives for firms to invest and innovate over the longer term.

Competition will still deliver benefits to consumers

Whichever action is taken, consumers should not pay more than necessary to correct market inefficiencies and should continue to benefit from the welfare-enhancing properties of competitive markets. Competition should continue to play its vital role of eroding any margin above true costs, such that firms do not earn excess profits over and above the price levels necessary to reverse environmental harms. It must also work to ensure that markets deliver

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what consumers want and need, by spurring firms to develop their product offering on other dimensions than sustainability. This would be a market delivering true allocative efficiency, whereby resources are utilised in the minimum amounts necessary to bring maximum value to society on a sustainable basis.



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