

ESG's Function In Merger Reviews Is Likely To Grow

By **Matthew List** (March 15, 2022, 3:54 PM EDT)

Increasingly, environmental, social and corporate governance, or ESG, issues are emerging in antitrust matters.

In this article, I describe how a new focus on environmental concerns may require an updated assessment of the potential for entry in a market when analyzing the potential competitive effects of a merger. In particular, in markets where entry has been viewed as unlikely in the past, the potential for new capacity to offer products that are more environmentally friendly may provide a new competitive constraint on incumbents.



Matthew List

Environmental standards have attracted the attention of antitrust agencies. In 2019, for example, the U.S. Department of Justice opened an investigation into whether a voluntary standard among automobile makers to limit emissions beyond what was required by regulations constituted an illegal agreement among competitors. The investigation was closed the following year.

The European Commission, on the other hand, levied fines of approximately \$1 billion dollars against automobile makers for allegedly agreeing not to outperform government emission standards despite having the technology to do so.^[1]

For mergers, ESG may take on a larger role as the Federal Trade Commission broadens the scope of its investigations and the agencies consider revisions to the merger guidelines. In some recent proposed transactions, the FTC has begun requesting information from merging parties regarding environmental concerns and other ESG topics that have not traditionally been the focus of merger probes. In light of the new focus on ESG issues, merging parties should consider how these factors may enter into the review of a potential transaction.

A Simplified Entry Decision Model

To demonstrate how ESG can lead to increased likelihood of entry, consider a simplified example in a market for a homogenous product where there has been little recent entry. A product is homogeneous when customers cannot distinguish it from competitors' offerings. For example, agricultural commodities like wheat or standard construction products like Portland cement can be thought of as homogeneous products, as opposed to differentiated products where consumers have preferences for a particular company's offerings — such as breakfast cereal.

In this simplified framework, assume that a new entrant would have to pay fixed costs in order to construct a new facility, and that these fixed costs would be sunk. In other words, once the new entrant invested these fixed costs into the construction of the new facility, they could not be recovered if the entrant decided to cease operations.

After incurring these fixed costs and constructing a facility, the new entrant could begin operations, using the margin earned on sales made from the new facility to recover his sunk investment. The entrant's total variable profit in each time period after entering will be equal to the difference between the per-unit price and the entrant's per-unit variable costs, multiplied by the number of units sold by the entrant. For simplicity, in this example I assume that there are no other fixed costs beyond the initial sunk investment.

Because of the homogenous nature of the product in this example, the potential entrant may expect that the price that customers are willing to pay to purchase from a new facility is the same as the price paid to incumbent providers.

The new entrant may, however, earn higher variable profits than incumbent providers if the newly built facility would be more efficient than existing capacity — i.e., if the variable costs of production at the new facility are lower than the variable costs at existing facilities.

With a large sunk investment required to enter, it may take many years for a new entrant to cover the initial fixed entry costs. Therefore, a potential new entrant will consider the expected net present value of the stream of future profits when deciding whether or not to enter.

A net present value calculation, which considers the time value of money, will result in lower figures for a firm with a higher discount rate. In the context of this example, the net present value of the future stream of profits will be lower for a potential entrant with relatively higher borrowing costs for the initial sunk investment.

In this simplified framework, a potential entrant will only proceed if the net present value of variable profits expected from future sales is larger than the sunk fixed cost of entry. That is, the benefits of entry listed must outweigh the costs of entry. See Figure 1.



Figure 1: Benefits and Costs of Entry in a Simplified Example

In a market with little recent entry, it could be the case that fixed cost of entry is so large relative to the net present value of future expected profits that investments in new facilities are simply not perceived to be profitable. Alternatively, even if the expected stream of future profits is greater than the fixed cost of entry, the implied return may be smaller than other alternative investments such that the sunk costs of entry are not profit-maximizing for a potential entrant.

Incorporating ESG Into the Entry Decision Model

In the simplified example above, it is assumed that customers are not willing to pay a premium to purchase from a new entrant given the homogeneous nature of the product. If customers are truly indifferent between products offered by different suppliers, this may be a realistic assumption.

However, customers with an ESG focus may now be willing to pay higher prices to purchase from a new entrant with a more environmentally friendly production facility. In a sense, ESG may lead to some degree of meaningful differentiation among otherwise homogenous products.

A newly built production facility may offer advantages over older existing capacity in terms of environmental impact. For instance, a newer facility may use less water or energy, emit less waste products or rely on alternative energy sources like solar power. The production lines at a new facility may also be better able to incorporate recycled materials.

Even if the final product made at a new facility is functionally equivalent to products from existing facilities, an ESG-focused customer may be willing to pay a premium to purchase from the new facility. Assume, for example, that the product in our hypothetical market is used as an input in the creation of other downstream products.

If these downstream products differentiate themselves based, in part, on how environmentally friendly they are, downstream producers may be willing to pay a premium in order to source inputs from newer, more environmentally friendly suppliers. See Figure 2:



Figure 2: Benefits and Costs of Entry in Simplified Example With ESG

The presence of environmentally focused customers in our market may alter the entry decision of new competitors. Suppose, for example, that we modify our initial cost-benefit analysis to reflect the existence of a subset of customers who will pay a premium to purchase from a new, environmentally friendly facility. These customers add a new benefit of entry that would not have been present absent

the focus on ESG.

The subset of customers willing to pay a premium to purchase from a new facility increases the total net present value of expected variable profits. For example, these customers may be willing to pay a higher price in order to secure a supply of an environmentally friendly input, which they can then tout in advertising or on their packaging.

Depending on the size of this environmentally focused customer cohort and the premium they are willing to pay, entry that was previously not profitable — i.e., prior to some customers becoming environmentally focused — may now be attractive.

Similar logic applies to an existing competitor who is considering whether to open new capacity. Like the de novo entrant, an existing competitor who is considering the construction of new environmentally friendly capacity may be able to attract customers willing to pay a premium to purchase from such a facility.

Unlike the new entrant, the existing competitor will also consider the extent to which the new capacity may cannibalize sales from existing capacity or put downward pressure on prices for existing sales. If forecasted demand from environmentally focused customers is expected to be sufficient to offset these costs, an existing competitor may now find expansion to be profitable.

For both potential de novo entrants and existing competitors considering capacity expansion, the emergence of environmentally focused customers materially impacts the expected profitability of sunk investment in capacity. In this way, recent interest in ESG may make entry that was previously viewed as unlikely instead more attractive.

Furthermore, while the presence of environmentally focused customers may drive the decision for a new competitor to enter or an existing competitor to expand, these customers are not the only ones who may benefit from the new capacity joining the market. Traditional customers, who in this example are not willing to pay a premium, may purchase from the new entrant in periods where the entrant has spare capacity.

Also, environmentally focused customers moving volume from incumbent capacity to new capacity will leave more existing capacity to compete for traditional customers.

The Impact on Merger Analysis

In reviewing horizontal mergers, the FTC and DOJ "consider the actual history of entry into the relevant market and give substantial weight to this evidence," according to agencies' merger guidelines.[2] The agencies also consider whether entry will be timely, likely and sufficient to respond to a merger-specific price increase or output reduction.

Beginning first with the actual history of entry, in many industries the focus on ESG is relatively new. In these industries, the entry decision may have only recently begun to incorporate the potential for higher profits from environmentally focused customers, as described above. In such a scenario, the history of entry — or the potential lack of historical entry — may not reflect the current dynamics of the market.

The presence of customers with a relatively recent environmental focus may not only affect the likelihood of entry — by making entry with new, environmentally friendly production more profitable —

but may also make entry more timely.

With the profit potential of environmentally friendly assets — as well as investors taking a greater interest in ESG — there may exist firms with relatively advanced entry plans underway that could be accelerated in the event of a post-merger price increase.

ESG may also create the incentive for customers to sponsor entry of new capacity. For example, a customer may commit to a large volume of orders from a new facility, which the new entrant can use to finance the fixed costs of entry.

Finally, new capacity may have lower marginal costs of production relative to older capacity. While ESG may help competitors finance the fixed costs of this capacity, the capacity's lower marginal costs will exert downward pricing pressure in the market.

ESG's role in merger analysis may expand further as revisions to the merger guidelines are considered. In the Jan. 18 DOJ and FTC Request for Information on Merger Enforcement, one of the questions posed was:

What factors impact the ability of new firms to enter a market that are not currently addressed by the guidelines.[3]

ESG may be such a factor.

Matthew P. List is a vice president at Charles River Associates.

The opinions expressed are those of the author(s) and do not necessarily reflect the views of the firm, its clients, or Portfolio Media Inc., or any of its or their respective affiliates. This article is for general information purposes and is not intended to be and should not be taken as legal advice.

[1] European Commission, "Commission fines car manufacturers €875 million for restricting competition in emission cleaning for new diesel passenger cars," press release, July 8, 2021.

[2] U.S. Department of Justice and Federal Trade Commission, Horizontal Merger Guidelines (2010), § 9.

[3] U.S. Department of Justice and Federal Trade Commission, Request for Information on Merger Enforcement, January 18, 2022, at 9, available at <https://www.justice.gov/opa/press-release/file/1463566/download>.