The Generalized Market Failures Approach *\*Draft: Contact the Author for Permission to Cite\**

1. Introduction

The market failures approach to business ethics has recently garnered substantial critical attention (see, e.g., Cohen and Peterson 2019; Moriarty 2020; Steinberg 2017; Hsieh 2017; von Kriegstein 2016; Smith 2018; Endorfer and Larue 2022; Singer 2018). Though precursors of this view can be found in the literature (e.g., McMahon 1981; Friedman 1970), it was Joseph Heath (2004, 2006, 2014, 2023) who developed the approach and gave it its name.

The market failures approach (henceforth: MFA) is concerned with the ethical obligations of managers of firms (Heath 2014, 69). Roughly, it holds that managers ought not to conduct their businesses in a way that exploits market failures. “Market failure” is a technical term, meaning any failure of the conditions of the first fundamental welfare theorem, sometimes called the “Pareto conditions” (see Arrow 1951). The theorem states that if the Pareto conditions hold, then the market equilibrium will use society’s scarce resources efficiently, meaning that no one could be made better-off without making anyone else worse off.

Efficiency, according to Heath (2014, chapter 7), is the implicit morality of the market. We coordinate much of our shared activity using markets, Heath claims, because of their ability to produce efficient results. Markets are good forms of social organization, according to Heath, because they are the best way to promote our values given empirical facts about the frailties of human psychology and the informational constraints that we face. As such, managers ought not compromise the very conditions that justify a market economy by profiting from breakdowns in the market’s efficiency. Managers are permitted to maximize profits, so long as they do not violate the market’s norm of efficiency in so doing. This is because the fundamental justification for the profit motive is that it is necessary for the operation of the price system which is essential to the efficiency properties of markets.

In this paper, I will argue that the MFA is more general than even Heath himself claims. The MFA describes the professional obligations of managers, but the view I develop, the *generalized market failures approach*, describes the obligations of all market participants. Since efficiency is the implicit morality of the market, it binds not just managers, but all market participants, including consumers, investors and workers. Market participants are permitted to maximize the benefit they gain from market interactions, as long as they do so in a way that does not take advantage of any market failures. Generalizing the MFA in this way has three benefits: first, we gain a unified understanding of the ethics of non-managerial market roles; second, we will develop an even better understanding of the duties of managers; finally, it gives us the resources to respond to some familiar objections to the MFA found in the literature.

In the next section, I will further motivate the MFA and explain how this motivation can be easily generalized to other market roles. Importantly, one can avoid benefiting from a market failure in two distinct ways: by *avoiding* transactions that exploit market failures or by transacting in such markets and then *remediating* the harm done, by compensating those negatively affected by the market failure. This section concludes by discussing how the remediation duties are to be split between the transacting parties and how to identify the parties to whom compensation is owed. In section 3, I use the tools of the generalized MFA to develop a unified ethics of consumption, investment and labor, respectively. This is the basis of a grand abductive argument for the generalized MFA. The view is strongly supported by the fact that it provides attractive and unifying explanations of our obligations in domains as variegated as carbon offsetting, CEO compensation, the reparations white Americans owe to black Americans and occupational licensure. Section 4 briefly concludes.

2. The Market Failures Approach and Its Generalization

**2.1 Motivating the MFA**

The MFA is an intervention in the long-running debate in business ethics between shareholder and stakeholder theorists. Friedman’s classic 1970 essay was the canonical articulation of the shareholder view, according to which managers are the fiduciaries of shareholders. Their only professional obligations, therefore, are to act in the best interest of shareholders, by increasing profits. Stakeholder theorists (e.g., Freeman 1984), by contrast, believe that the interests of other constituencies inside and outside the firm deserve consideration and protection by management as well. These include the interests of employees, suppliers, customers, communities and the environment. Shareholder theory has often been associated with the “oxymoron” view of business ethics (von Kriegstein 2019), the view that there is no subject matter for such a field to study.

Heath’s view is perhaps best understood as a rehabilitation of shareholder theory, but one that can accommodate many of the insights of stakeholder theorists about ethical business conduct. He offers a rational reconstruction of Friedman’s argument revolving around the following passage (2002, 133):

"there is one and only one social responsibility of business--to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game, which is to say, engages in open and free competition without deception or fraud."

The association of the shareholder theory with an amoral conception of business turns on a narrow reading of this passage that emphasizes only the examplesof violations of the rules of the game that Friedman explicitly mentions: deception and fraud. Heath encourages us to instead broaden our view of what would constitute a violation of the rules of the game in business. Heath argues that deception and fraud are prohibited *because* they would lead to violations of the Pareto conditions that make markets efficient—and thus socially desirable—in the first place. Accordingly, other activities that would lead to violations of the Pareto conditions are impermissible too—they also violate the “rules of the game” of business. Efficiency is the fundamental justification for the profit motive and markets, according to Heath, because efficient markets distribute scarce resources in a way that minimizes waste and maximizes the satisfaction of human wants.[[1]](#footnote-1) Managers should not act in a way that compromises the justification for the institution that is a precondition for their very actions.[[2]](#footnote-2)

Heath’s main objection is that Friedman’s account does not incorporate the manifold ways that markets can fail other than through fraud and deception. Indeed, Heath (2014, 37) presents a list of ten other “rules of the game” that market efficiency depends on, in the form of injunctions to managers. These injunctions include: minimize negative externalities, reduce information asymmetries, avoid erecting barriers to entry, and avoid seeking protectionist measures. Violations of any of these injunctions in the pursuit of profit would result in the failure of one of the Pareto conditions, precluding market efficiency and thus canceling the justification for the profit motive itself, and more generally, for markets as a form of social organization. The MFA’s fundamental injunction is this: firms should not profit from exploiting market failures.[[3]](#footnote-3)

The MFA thus takes the task of business ethics to be explicating what the rules of the game are and giving managers an understanding of how they can abide by them. Consider the following analogy: there is a familiar rule-consequentialist justification for our adversarial legal system. Zealous advocacy by lawyers on behalf of their clients is justified, even when the client is guilty, because the system of legal adversarial ethics as a whole produces good results. Likewise, a market system oriented around (adversarial) profit-seeking is justified because it produces good consequences on the whole—it distributes society’s scarce resources efficiently. But lawyers cannot do just anything to advance the interests of their clients: they cannot intimidate witnesses or bribe the judge. Likewise, market participants cannot do just anything to make a profit: they cannot pollute the environment or collude with competitors. Legal ethicists should try to describe which ways of advocating for a lawyer’s client strengthen the judicial institution of adversarial ethics, and in just the same way, the ethics of market participation should try to describe which types of profit-seeking are consistent with the institution’s justification.

**2.2 Generalizing the MFA**

 I can now clearly state how I aim to generalize the MFA. Heath (2006, 534) writes that “business ethics is concerned with the special obligations that arise out of the managerial role, and which are imposed upon the manager *qua* manager.” He argues that the MFA characterizes the obligations of the managerial role, much as theories of legal or medical ethics characterize the obligations of the roles of lawyer or doctor. But this is too narrow a focus: Heath’s arguments for the MFA do not depend on the special role of managers;[[4]](#footnote-4) rather, they depend on the more general role of market participant. Firms, investors, consumers and workers all participate in markets. The justification for why managers must abide by the rules of the game is that if they do not, market efficiency will be compromised, undermining the justification for markets as a form of social organization. But it is easy to see that this justification extends perfectly to other market participants: the failure of workers, investors or consumers to abide by the rules of the game also results in the violation of the Pareto conditions, which likewise undermines the justification for markets as a form of social organization. The MFA should not simply describe the professional obligations of managers (though, as we will see, the generalized MFA characterizes these obligations more appropriately than does the classical MFA). Rather, there are many different roles in the marketplace, and occupants of each of those roles, in their capacity as market participants, must abide by the rules of the game. The MFA, once generalized, is a more powerful analytical framework than has heretofore been recognized by scholars in business ethics.

 A couple of arguments by analogy can help us see how the MFA generalizes. Consider two cases:

*Carvana*: A sales manager at Carvana sells a used Prius to John Smith, knowing that this Prius has substantial defects.

*Private Party***:** I sell my used Prius to John Smith, knowing that this Prius has substantial defects.

Let us suppose that everything in these two cases is the same, except that in the one case the car is sold by a corporation and in the other it is sold by a private party. Heath’s MFA implies that the Carvana sales manager is under an obligation not to profit from the asymmetric information between him and Smith, and indeed, is under an obligation to reducethe information asymmetries between him and his potential customers.[[5]](#footnote-5) But now we must ask: why wouldn’t a private party in the exact same position of the Carvana manager be under the exact same obligations? What is it about *being employed by a firm* that gives a market participant obligations that they would not otherwise have? I think there is nothing that could explain why the Carvana manager and the private party have different obligations, so it must be that their obligations do not differ after all. And I think that Heath is right about the obligations of the Carvana manager, so it must be that the private seller is obligated not to profit from the information asymmetry between him and his buyer as well. In both cases, the fact that exploiting asymmetric information compromises market efficiency explains the obligations market participants have not to exploit that asymmetric information.

Another argument by analogy can be made for pollution of the environment, one of the biggest market failures in modern economies. Consider two cases:

*Business Trip*: You have to fly from New York to Los Angeles for several days of meetings with your colleagues. Your company pays for your travel.

*Vacation***:** You want to go on vacation, and you fly to Los Angeles for several days to escape the cold and dark New York winters. You pay for your travel personally.

According to Heath’s MFA, the business trip violates the ethical obligations that the company is under not to profit from any market failures: the business’s costs are lower than they would be if carbon were correctly priced. But it seems that the same obligations must apply to the vacation. The very same activity has occurred and market efficiency was compromised to the same degree in both cases, so it is unclear how facts about the social role of the passenger in the second case could explain why the second flight was permissible but the first flight was not. Emitting a large amount of carbon could not be rendered morally unproblematic by the fact that it was done by a private individual rather than a corporation. Consumers are bound by the generalized MFA in precisely the same way that corporations are: when they participate in the market by consuming, they cannot exploit market failures for their own gain.

**2.3 Avoidance vs. Remediation**

 The generalized MFA is a better view than the classical MFA, in part, because its explanatory purview is much wider. Just as the classical MFA allows us to exhaustively characterize the ethical obligations of managers, the generalized MFA also allows us to exhaustively characterize the ethics of consumption, the ethics of investment and the ethics of labor, as I will demonstrate in the next section. But one other advantage of the generalized MFA is that it allows us to respond to some familiar and entrenched objections to the classical MFA. The most serious objection, to my mind, is that the MFA applies only under ideal circumstances, and thus has no practical implications for the markets and market participants that actually exist (Steinberg 2017; Moriarty 2020). A related problem is that the MFA seems to prescribe overly demanding obligations (Heath 2014, 202; Singer 2018, 50; Endorfer and Larue 2022, 15). One final complaint is that managers would have no way of knowing the content of their obligations under the MFA, resulting in failures of action guidance from the theory (Endorfer and Larue 2022).

 To see how the generalized MFA can respond to these objections, we need to distinguish two ways we can comply with the demands the generalized MFA makes of us. The classical MFA said that firms should not profit from market failures. To generalize this, we need to say instead that *market participants* should not *benefit* from market failures. Market participants should not benefit from market failures for two reasons, one that Heath mentions and one that he does not. Heath argues that exploiting market failures for one’s own benefit is inconsistent with the justification for markets as a form of social organization. But benefitting from market failures is also wrong because it constitutes expropriation. Transactors who exploit market failures impose costs onto others, advancing their own interests at the expense of those of others. This is a wrongful form of expropriation. Theorists writing in the secondary literature, however, have not realized that there are two ways an agent can conform to the requirement not to benefit from market failures.

1. *Avoidance*: do not participate in a market that requires violating the rules of the game.
2. *Remediation*: participate in the market that requires violating the rules of the game, but devote some of your resources to either compensating those harmed by your participation in the market or trying to correct the market failure.

Return to our example of flying on a plane. This flight releases carbon into the atmosphere, a negative externality, so flying is impermissible according to the MFA because flyers benefit from a market failure. There are two ways to comply with the general obligation in this case. One can refuse to fly (avoidance), or, one can purchase carbon offsets (remediation). The ubiquity of market failures in the modern economy has resulted in much criticism of the MFA (Moriarty 2020; Hsieh 2017). The thought behind these objections seems to be that there would be no way for market participants to *avoid* all conduct that would have them benefit from a market failure (e.g., Moriarty 2020, 115; Endorfer and Larue 2022, 12). And this is correct; it would be infeasible for any of us—firms or consumers—to avoid emitting any carbon into the atmosphere, given that the entire economy runs on fossil fuels as of this writing. So, these objections conclude, the MFA is incorrect because impossibly demanding.

This objection neglects the fact that remediation is available as a possible, though undertheorized, avenue of compliance with the MFA’s injunction not to benefit from market failures. If one purchases enough carbon offsets and flies, then one will not benefit from the fact that carbon is not priced at its social cost, because one has also paid for the carbon that one used. I will now show how to compute the magnitude of remedial obligations, how they are distributed among transacting parties, and in the next subsection, I will identify how funds earmarked for remediation should be spent.

To compute how much remediation is owed, first, we must be sure to avoid double counting obligations under the generalized MFA. We should not assign full blame to both a flyer and the airline for the carbon emitted from the flight. We need to specify how obligations to remediate are distributed between the transacting parties. Our guiding idea is that transacting parties cannot benefit from market failures. Each transacting party receives some benefit from any transaction, otherwise, the transaction would not have occurred. Call the sum of the benefits that the transacting parties enjoy the *private surplus* and call the sum of the harms resulting from the market failure the *market failures budget*. The market failures budget should be paid to those who suffered the harms, and each transacting party must pay in proportion to their share of the private surplus. Once each party pays their share of the market failures budget to those who were harmed by the market failure, the conduct will be fully remediated because neither transacting party will ultimately benefit from the market failure, and the third parties who were harmed will be made whole.

Here is a concrete example. Suppose that the cost of a ticket from New York to Los Angeles is $450, but the carbon that is emitted has a social cost of $50, making the total cost of the trip $500. Further suppose that the social benefit generated by the flight is $1,000, and that there are no positive externalities. Hence, the *private surplus* created by this transaction is $550, split between the airline and the passenger. According to the generalized MFA, the passenger and the airline must together deliver compensation in the amount of $50—the market failures budget—to those who are harmed by the emissions.

How should the market failures budget be divided between passenger and airline? That depends on how the private surplus is divided between the transacting parties. If the airline industry is highly competitive, the consumer will capture all of the benefits and the airline’s profit will be zero. If the airline is a monopoly that can practice first-degree price discrimination, then the airline will capture all of the benefits and profit $550, leaving the consumer with no surplus whatsoever. In the latter condition, the airline must pay $50 to compensate those harmed by the emissions. In the former condition, the passenger must pay $50 to compensate those harmed by the emissions. More generally, each transacting party must compensate those harmed by the market failure in proportion to how much of the private surplus they captured.

(Since its deregulation in 1978, the air travel industry in the United States has been highly competitive, with airlines making very little profit. As such, the responsibility for offsetting the negative externalities from flying falls largely on passengers. This is not quite true for first class or business class passengers, however. What profits airlines do make are largely made on these seats, and the emissions resulting from these seats are 2.6 to 4.3 times larger than the emissions resulting from economy seats.[[6]](#footnote-6) The sale of a business class seat thus generates more offsetting responsibilities in total, and the airline must assume a greater share of these responsibilities).

 I must mention two further complications. First, I have assumed above that there are no positive externalities. Even if there are positive externalities, transacting parties should still split the market failures budget proportional to how much they benefitted from the market failure. Beneficiaries from positive externalities do not have remediation responsibilities when there are negative externalities to the transaction that produced the positive externalities. This is because there is a fundamental normative asymmetry between positive and negative externalities, one which was highlighted in a famous argument of Nozick’s (1973; 95, 280-282). Second, I wrote that one’s remedial obligation is proportional to the share of the private surplus one enjoys. But there are some cases in which this is only an approximation of one’s true remedial obligations. My view is that one’s remedial obligations are proportional to the percentage of the private surplus one would have had were the market in which one transacted a perfect one, not proportional to the percentage of the private surplus one actually enjoyed; these come apart under some conditions. This is because one should not benefit *from a market failure*, not that one should not benefit *from transacting in failed markets*. I explain the difference between these and present a further discussion in the technical appendix.

We are now in a position to state the fundamental principle of the generalized market failures approach:

**Proportional Compensation**: when a transaction occurs that exploits a market failure, the parties to the transaction must compensate those harmed by the market failure in the amount of the market failures budget. Each transacting party must pay in proportion to how much they benefitted from the market failure.[[7]](#footnote-7)

I formally state this principle in the technical appendix. The general idea, though, is very simple: benefitting from a market failure is illegitimate; indeed, it is akin to expropriation. If you must transact in failed markets then you have to remediate the harm done by sufficiently compensating the people harmed by the market failure. Your remedial obligations are proportional to how much you benefitted from the market failure.

 In some cases, the market failures budget will be greater than the private surplus: the transacting parties will not have enough to compensate those harmed by the market failure.[[8]](#footnote-8) In these cases, full remediation is not possible, at least without leaving one party with a negative amount of surplus after the compensation has been paid. As such, avoidance is the only option for a rational agent who intends to fulfill her moral obligations. This is exactly the right result. To continue with our example of flying, some flyers would still choose to fly were carbon priced at its social cost, but other people would choose to forgo flying once all of its costs are internalized. The former group should take their flights and pay remediation, and the latter group should avoid flying.

 Recall the objection I mentioned above that the MFA is not realistic because it gives overly demanding advice to managers that holds weight only in an ideal situation. Heath (2014, 37-38) acknowledges the concern.[[9]](#footnote-9) Some companies will in fact fail to abide by the rules of the game. Given competition in the marketplace, any firm that strictly abided by the rules of the game would be driven out of business by firms that do not. Call this the race to the ethical bottom. Here is my reconstruction of the objection: firms cannot abide by the rules of the game (on pain of going bankrupt, since their competitors will in fact violate the rules of the game), but the MFA says that firms ought to abide by the rules of the game, but it is never true that an agent ought to do something that they cannot do.

The generalized MFA largely sidesteps these problems because of the fact that it recognizes the possibility of remediation and divides the remedial responsibilities between the two transacting parties. Managers, consumers and investors in the firm share responsibility for complying with the MFA. What’s more, for the generalized MFA, there is a built-in mechanism that ensures that firms can comply with their obligations, since the division of remedial obligations is determined by industry structure. In competitive industries, where firms are under the most pressure to make money by violating the rules of the game, more of the remedial responsibilities will be owed by the consumers, since in competitive industries consumers capture most or all of the surplus generated by transactions that exploit market failures. That is, in just the industries where the race to the ethical bottom is most intense, firms actually owe relatively little in compensation to those harmed by market failures, because they see a relatively small benefit from the market failures. This is because firms are pushed to exploit market failures by the demand of consumers who capture most of the surplus from the transaction, and hence, it is consumers who owe remedial obligations. In industries where firms face less competition and have healthy profit margins, managers and shareholders share with consumers these remedial obligations for exploiting market failures. I discuss how remedial obligations are split between managers and shareholders in section 3.

One additional advantage of this account is that it leads us to a picture of how responsibility for compensating those harmed by market failures should be distributed across the entire value chain. Though we have just been analyzing a business-consumer transaction, we must also consider the fact that there can be market failures in factor markets. An airline must buy planes, fuel, insurance, and other supplies. Some of these things were made in a way that exploits market failures—the government intervention in the airline manufacturing duopoly and the externalities in the oil exploration and refining sectors are but two examples that come to mind. Some of the airlines’ suppliers make a profit that is in part due to the exploitation of these market failures. So, the parties to the transactions throughout the entire value chain must compensate those harmed by the market failures in accordance with proportional compensation. I hope to use my view to further analyze these issues in future work.

Among the criticisms of the MFA, the one that has the most force is the epistemic critique that market participants could not know what their obligations are under the MFA. This critique is spot on: the unfortunate thing about market failures is that they distort prices, which contain the information that individuals need to make economic decisions (Hayek 1945). My approach essentially recommends that people act as if markets were perfect, but they lack the ability to do this because market failures ensure that prices cannot fulfill their informational function. But all that is required for my approach to be action guiding is that market participants know what their obligations are in approximation. We often know that we participate in imperfect markets, and economists intensely study the magnitude of welfare losses due to imperfections in a variety of markets. As long as we can roughly estimate our remedial obligations, the approach will be usable enough for practical purposes. Section 3 of this paper is a proof of concept that these obligations can be approximated well enough for practical purposes.

**2.4 Spending the Market Failures Budget**

In order to comply with the injunctions of the generalized MFA, market participants should not benefit from market failures. They can do this by avoiding transactions in markets where there are failures. Or, they can do this by transacting in such markets, but remediating the harm they have done. Responsibility is divided between the transacting parties by the principle of proportional compensation. Our final question is: to whom is this compensation owed, and what forms can it take? How should the market failures budget be spent?

We can look to the philosophical literature on moral offsetting as an initial guide. One option is to spend the budget in the way that does the most good possible, for instance, by promoting effective public health interventions in developing countries. This option is generally what consequentialists favor (for discussion, see Stefansson 2022, John et al. forthcoming). There are two problems with this response. First, the thing that has the best consequences is *not* (1) transacting and then spending the budget in the way that does the most good; rather, it is (2) spending the budget in the way that does the most good and not transacting at all, using the money one would have spent transacting to also do the most good. This is an instance of the demandingness problem for consequentialism. In other words, there seems to be no way to reconcile consequentialism with the morality of offsetting, because consequentialism is so demanding. Second and more importantly, this approach does not benefit the parties who were harmed by the market failure. These people are owed compensation, and by benefitting the people who are in the most need in general, the transactors would neglect their obligations to the parties they harmed.

It seems, then, that the budget should be spent to benefit the people who were harmed by the transaction. But this option has problems too. Benefitting the *particular* people who were harmed by your transaction is overly myopic. One problem is that it will be impossibly difficult to locate these people. When I buy a new electric vehicle, I could not possibly track down the *particular* Congolese miners working in exploitative conditions who mined the cobalt in *my* car’sbattery. What’s more, even if I could do this, my compensating the particular people who mined the cobalt for my car (rather than other people who work in the exploitative industry mining cobalt for other cars) would be to overly fetishize the purity of my own consumption (for a further discussion, see Kingston 2021). Another problem is that it may not be a determinate fact which people are harmed by some market failures. This is the case for carbon emissions, for instance, which primarily harm people who have not yet been born, and further, our emissions and offsetting behaviors can change the identities of the people who will exist in the future (Broome 2012).

My view on how the market failures budget should be spent weaves between these two extreme views. We are not obligated to do the most good with the market failures budget, nor are we required to benefit the particular people harmed by our transactions. Rather, we should spend the market failures budget in the way that maximally benefits those people who were or would be harmed by the market failure that our transactions are an instance of. This proposal has a few advantages.

First, it conceives of our obligations to remediate as *role-directed*, rather than directed to particular people. The obligation arising from a market failure is directed from the role of transactors who benefit from the market failure to the role of those who are harmed by the market failure, not to and from the people who contingently fill those roles. Directed obligations are usually thought of as holding between particular people. In interpersonal, everyday morality, most of our obligations are directed to individual people. If I promised to meet you for lunch today, then I have an obligation directed to you to go to lunch. Though our interpersonal obligations are well described as directed from person to person, our obligations in public life—to include obligations in the commercial, political and civic spheres—are often not directed to particular people. My obligation to vote, if I have one, is not owed to the President, or to the governor, etc., but rather, it is owed to my fellow citizens at large *qua* fellow citizens.[[10]](#footnote-10) Obligations of fair play in the commercial sphere are like this too. By participating in our elaborate system of institutionalized market interaction, we come to owe obligations to the people harmed by that system of institutionalized market interaction, not the particular people who happened to be harmed by some instance of that system’s operation.

The other advantage of this proposal is that it ensures that those who have been or would be harmed by the market failure are maximally benefitted by remediation. We should spend the budget in the way that maximally benefits those harmed by the market failure because otherwise, those harmed would have a legitimate complaint. The view incorporates the consequentialist’s concern for maximizing benefit in this respect. Market failures are features of institutional arrangements that persist over time. As such, there are two classes of people harmed by a market failure: people who, at present, have been harmed by the market failure, and people who will be harmed by it in the future if no action is taken. This means that one can spend the market failures budget either to compensate those harmed in the past, or to compensate those who stand to be harmed in the future. One can do the latter by trying to correct the market failure in question through lobbying and political advocacy, so that the people who would be harmed by the market failure are not actually harmed. Which of these you should do depends on how you can spend your resources most effectively. In sum, one should spend the market failures budget in the way that will maximally benefit the people who have been or will be harmed by the market failure in question (not necessarily the people who were harmed by your transaction in particular). I give a concrete illustration of how this approach works for the case of carbon offsetting in section 3.1.

**2.5 Conclusion**

In this section, I have argued that the MFA does not simply apply to managers of firms. Rather, it applies to all market participants. The view has both consequentialist and deontological justifications. The norm of not benefitting from market failures applies to all market participants in virtue of the nature of the activity they engage in. Markets are useful as a form of social organization because they efficiently distribute goods and services. Instituting a system in which the Pareto principles for market efficiency hold has good consequences, because none of society’s scarce resources are wasted. From a deontological perspective, we can also see that it is wrong for market participants to transact in a way that undermines market efficiency: this course of action could not be universally willed by a market participant, since if everyone exploited market inefficiencies, then markets as a system of social organization would collapse.

I spelled out the details of how market participants can comply with the generalized MFA, and this portion of the view, too, has both deontological and consequentialist features. Avoidance and remediation are both legitimate ways to comply with the generalized MFA’s requirements. The optimal mix of these strategies among all market participants is determined by consequentialist principles. But the division of remedial responsibilities under the principle of proportional compensation is based on fairness, a deontological value. Finally, though deontological principles indicate that the market failures budget should be spent to compensate those harmed by the market failure—because the obligations in question are role directed—consequentialist principles require that the budget should be spent in the way that maximally benefits these people.

The pluralist nature of the view results in some key advantages. I showed how my view can answer several familiar objections to the MFA in the secondary literature, ones that are largely the result of the neglect of remediation as a way to satisfy the MFA’s requirements. But more importantly, I will now demonstrate how the generalized MFA can provide a plausible and unified account of three market roles: consumption, investment and labor. What follows is necessarily programmatic in nature, since the ethics of consumption, the ethics of investment, and the ethics of labor each deserve a fuller treatment than space allows here. But I hope that the reader will see what follows as a grand abductive argument for the generalized MFA—the fact that it can give an attractive, unified explanation of our obligations in a variety of domains strongly speaks in its favor.

3. Market Failures in Consumption

In this section, I will sketch how the generalized MFA applies to consumers, by analyzing two concrete problems in the ethics of consumption: offsetting for carbon emissions and the ethics of housing. I focus on these two because they are the areas where ordinary consumers in developed countries derive the most benefit from market failures.

**3.1 Failures in the Energy Market**

Perhaps the largest market failure in the modern economy, and the one that is most urgent to address, is carbon emissions and other forms of environmental degradation resulting from commercial activity. The generalized MFA has an elegant and plausible account of the environmental obligations of consumers. Carbon emissions are a negative externality of our consumption. The government should impose a Pigouvian tax to correct this externality,[[11]](#footnote-11) but no country in the world has imposed a tax as high as the social cost of carbon, many countries do not tax carbon at all, and some countries even subsidize it. This means that consumers around the world benefit from failures in the market for energy on a daily basis. Consumers either need to stop emitting carbon (avoidance) or compensate those harmed by their emissions (remediation). Complete avoidance would be impossibly demanding, since the entire economy still runs on fossil fuels. So, remediation is the only option. I will first discuss how to calculate the magnitude of one’s remedial obligations, then I will discuss how the market failures budget should be spent.

Here is how to calculate how much we have to spend to remediate the harm done by our emissions. First, we need to know the magnitude of the negative externality, that is, we need to know the social cost of carbon. Estimates vary, but the exact figure we use for this illustrative analysis does not matter; suppose that we agree with a recent estimate that it is $185 per ton (Rennert et al. 2022). Now our analysis can split between the collective and individual level.

Humanity emitted 36.8 billion tons of carbon in 2022, according to an international energy agency report.[[12]](#footnote-12) Multiplying this by the social cost of carbon of $185 per ton, we arrive at the astounding sum of $6.8 trillion. This is the global market failures budget for our carbon emissions, everyone in the world needs to collectively spend $6.8 trillion on remediation. This is over 7% of global GDP. This sum will be divided among all economic agents who emitted carbon according to the principle of proportional compensation.

We can do the same analysis at the household level. The average American’s carbon footprint in 2023 was estimated to be 16 tons.[[13]](#footnote-13) Since the price that you pay to emit carbon in America is $0 per ton, and its social cost is $185 per ton, the average American underpays by $2,960. This is the market failures budget. However, the consumer is not on the hook for all of this. Given the principle of proportional compensation, if the companies that sell carbon emitting products and services to consumers make any profits at all, then they are liable for paying some of the market failures budget as well. How much the typical consumer is liable for depends on the ratio of aggregate consumer surplus to aggregate profit in the fossil fuel industry.[[14]](#footnote-14)

Now, how should the market failures budget be spent? There are multiple possibilities. Many people will be harmed by climate change, some of them alive today, some of them yet to be born. One option is to compensate these people directly. This kind of spending is broadly known as “adaptation.” It can take a variety of forms, but falls in two main camps: relocating those affected by climate change to safer areas, or paying for those affected to “climate proof” their communities by installing flood walls, air conditioning, better infrastructure, etc. Or, compensation could take the form of direct cash transfers between those harmed and those who emit.

I consider this a second-best option, though one that might be appropriate in some circumstances. Instead, we should compensate those who stand to be harmed by climate change by reducing the amount of carbon in the atmosphere, so that the bad effects of climate change do not occur in the first place. There are two ways that we can *reduce* the amount of carbon that would have been in the atmosphere if not for our actions: *preventing* new emissions by incentivizing people not to emit, and *removing* and safely storing old carbon.

In a recent paper, Barry and Cullity (2022) argue that these forms of offsetting are not on a moral par. Removing is generally permissible whereas preventing is not, they argue, because by removing, you cause someone not to do something that they already were not permitted to do, but were going to do anyway. The person who you pay not to emit would have done something impermissible by emitting and failing to offset their emissions. Hence, if you pay them not to emit, this cannot render your emissions permissible, because that would be double counting. You are claiming their not emitting as a credit to offset your own emissions, but their not emitting was the only permissible course of action in the first place. Their not emitting could render permissible your emitting only if they were entitled to emit, but no one is entitled to emit, because pollution harms innocent bystanders. Barry and Cullity’s core idea is that you can’t make your impermissible action permissible by paying someone else not to perform a similar impermissible action that they would have performed if not for your payment.

Should we join Barry and Cullity in thinking that we must pay to have carbon removed, rather than pay to prevent new emissions? I don’t think so, since Barry and Cullity’s argument is flawed in a few ways. These flaws, and the flaws in the literature on offsetting more generally, owe to the fact that emissions are often considered in abstraction from their institutional and economic contexts.

To see these flaws, something of a gestalt shift is required. The basic unit of account in the literature is the carbon molecule, not the monetary value of harms and benefits enjoyed by the emitters and those harmed. It is a dogma of the literature on carbon offsetting that you are obligated to reduce the amount of carbon in the atmosphere by an amount equivalent to what you emitted; this, it is thought, is just what it is to morally offset your emissions. This dogma is reflected in the commitments of corporations to become “carbon neutral” or even “carbon negative.”[[15]](#footnote-15) This dogma is wrong. The explanation of why emitting without offsetting is impermissible is that you benefit from a market failure in so doing. In order for an offset to undo the wrong of your emissions, you should not offset the same amount of carbon you emitted. Rather, you should calculate how much you benefitted from the market failure, and then you should spend this sum in the way that will lead to the greatest reduction of carbon in the atmosphere (whether that reduction is achieved by preventing or removing). The amount you reduce using this procedure is not necessarily the amount you emitted; indeed, it will often be much more, if other people fail to offset their own emissions, as I will show below. The crux of the disagreement is this: Barry and Cullity think that the fact that other people don’t satisfy their moral obligations constrains the scope of what actions are permissible for you, but I think that it does not change the content of your moral obligations at all, and if anything, sometimes presents opportunities for you to do more good by satisfying your existing moral obligations.[[16]](#footnote-16)

The best way to see this is by looking closely at the economics of carbon reduction, something that our theories of our moral obligations in this domain must be highly sensitive to. Removal of carbon dioxide from the atmosphere is very expensive. “Removal” of carbon by planting trees, what comes to mind for most people when they think of carbon removal, is really just temporary sequestration of carbon; in several decades the trees will either be cut down or die, releasing their carbon back into the atmosphere. “Permanent” removal of carbon from the atmosphere, and its relocation to geological storage, is much more expensive. As of the present writing, most carbon removal technologies have a cost of removal that is well above the social cost of carbon, sometimes two or three times more expensive.[[17]](#footnote-17) Carbon removal is more expensive than prevention of emissions because the companies that offer carbon removal services have not yet achieved economies of scale. One reason for this is that it involves a new technology, but perhaps a more important reason is that demand for carbon removal is very low. This is because most agents that emit carbon act impermissibly by failing to satisfy their moral obligations to remediate: most people don’t purchase offsets.

Under these non-ideal conditions, preventing a unit of carbon from being emitted is much cheaper than removing a unit of carbon. This reality leaves five options for how to offset:

1. You can spend your entire emissions market failures budget on removing, ultimately removing less carbon than you emitted.
2. You can spend your entire emissions market failures budget on preventing, ultimately preventing more carbon from entering the atmosphere than you emitted.
3. You can spend your entire emissions market failures budget on the mix of preventing and removing that maximizes the amount of carbon you remove, subject to the constraint that the amount of carbon you remove and prevent is equal to the amount that you emit.
4. You can spend an amount less than your emissions market failures budget on preventing, so that you prevent as much carbon from entering the atmosphere as you emit.
5. You can spend more than your emissions market failures budget on removing, so that you remove as much carbon from entering the atmosphere as you emit.

Which of these options should you choose? It seems to me that Barry and Cullity’s account suggests option 5, since they believe that only removal is permissible and you should remove as much as you emit. Brian Berkey (manuscript) engages with Barry and Cullity’s views and suggests something like option 3. The generalized MFA implies that option 2 should be chosen.

Options 4 and 5 can be excluded because they are not demanding enough and too demanding, respectively. As I argued above, the norms of the market, applying to all market participants and all market transactions, require that market participants do not benefit from market failures, by paying compensation to those harmed by market failures. One is not obligated, in one’s market activity, to go above and beyond this norm, as option 5 would have it. Conversely, by failing to spend one’s entire market failures budget, one unjustly benefits from a market failure. In particular, on option 4, one benefits both from the market failure itself and the failure of other market participants to satisfy their obligations, which makes preventing artificially inexpensive.

The arguments against options 1 and 3 are similar in form. When you offset entirely by removing, you fail to remove enough carbon to cancel out your emissions. Even though you spent your entire market failures budget, ensuring that you did not benefit from a market failure, you have still harmed third parties by leaving a positive amount of carbon in the atmosphere. These third parties have a complaint: that you have used your resources—which were earmarked for benefitting them—in a suboptimal manner. This complaint can be voiced for option 3 as well, since you could have spent your entire market failures budget on preventing.

Option 2 should be chosen because you do not benefit from the market failure of unpriced carbon, and the people who are harmed by that market failure are left with no complaints because you have maximized the benefits that they receive. The main objection to option 2 is that the way you offset takes advantage of the fact that other people fail to satisfy their market obligations, which makes preventing artificially cheap. But the key thing to see here is that you do not benefit from this. Preventing just the amount that you emitted (option 4) would be wrong because, since preventing is artificially cheap, you would benefit from the market failure and from the fact that others do not satisfy their obligations. Barry and Cullity and Berkey are right to suggest that one should not benefit from the fact that other people fail to satisfy their moral obligations. But it is not correct to think that one should refrain from doing the most good one can in satisfying one’s remedial obligations if a necessary condition for doing good in that way is the fact that others fail to fulfill their moral obligations. Hence, one should spend one’s market failures budget in the way that offsets as efficiently as possible, regardless of the (non)performance by others of their moral obligations. A deontological principle (proportional compensation) determines the magnitude of your remedial duties and the identities of those to whom the duties are owed, but one should satisfy that obligation in the most efficient way, according to consequentialist principles.

This concludes my discussion of our obligations to offset our emissions, and how we should satisfy these obligations. It established the surprising conclusion that—given that other people fail to offset, which makes offsetting by preventing artificially cheap and offsetting by removing artificially expensive—to fully *morally remediate* one’s emissions, one must offset more than one emitted. Agents are morally required to pay the social cost of their emissions, not offset the amount of carbon they emitted. The only reason the latter is cheaper than the former is that other agents fail to satisfy their moral obligations, but this does not lessen one’s own obligations.[[18]](#footnote-18)

**3.2 Failures in the Housing Market**

Now let’s consider the ethics of housing. Housing has a dual character, one that makes it a particularly interesting test case to study the implications of the generalized MFA. It is at once the most expensive service that most households consume,[[19]](#footnote-19) and the largest investment in the portfolios of most households. Since the generalized MFA applies to all market roles, we can provide a unified ethics of housing that is sensitive to both its consumption and investment characteristics.

The housing market in the United States and most other rich countries is riddled with market failures. First, the market is highly illiquid, with transactions made more difficult and expensive by local monopolies or cartels of brokers and agents. Second, the mortgage finance market receives substantial subsidies through government sponsored mortgage insurance and reinsurance, making it artificially easy to finance a home, raising prices. Third, many states and the federal government subsidize homeowners’ insurance, particularly in areas that are becoming riskier because of climate change. Fourth, and most important, there are political restrictions on the supply of housing established on the local level, and in some places, these restrictions are quite severe. Zoning restrictions (including exclusionary zoning), strict permitting requirements and minimum lot sizes limit the local supply of housing. Finally, housing is a composite entity consisting in a structure and the land that it sits on. Land is a natural monopoly; “they aren’t making any more of it,” as the saying goes. Hence, privately owned land, by its very nature, is a market failure.[[20]](#footnote-20)

Restrictive land use policies, in many cases, were rooted in systematic attempts to exclude African Americans and other minorities from white neighborhoods. They were accompanied by a practice known as “red lining” designed to exclude African Americans from the mortgage finance market as well. What’s more, the highest quality school districts and the best opportunities are located in the highest cost neighborhoods, so exclusion from quality housing goes hand in hand with exclusion from quality education.[[21]](#footnote-21) Many housing experts believe that our current land use regulations serve the same purpose as older, explicitly racist tactics such as deed restrictions that were made illegal in the mid-twentieth century. These restrictions on the supply of housing drive up its price, resulting in unaffordable housing, housing insecurity, homelessness and the spatial misallocation of human capital.

Heath’s (2014, 37) seventh injunction to managers is “Do not oppose regulation aimed at correcting market imperfections” and his fifth is “Avoid erecting barriers to entry.” Homeowners usually violate both. Once we generalize the MFA from only managers to all market participants, we can see that homeowners in America are unjustly benefiting from market failures, ones that are largely of their own making.[[22]](#footnote-22) Homeowners have been highly successful at implementing local regulations and barriers to entry that increase the value of their investments and make housing less affordable for others. Homeowners do this in practically every local jurisdiction in the United States, though the magnitude of the effects differs widely. Thus, homeowners face a choice: they can avoid participating in housing markets that cause them to benefit from market failures, or, they can pay remediation to those harmed by failures in the housing market.

The former is infeasible, as most homeowners will not be willing to sell their homes and start renting. Luckily, the procedure for dividing the remediation responsibilities is quite simple. Since the owner of a home is at once the consumer of the services it provides and the producer of those services, the owner is responsible for the entire market failures budget.[[23]](#footnote-23) A homeowner’s market failures budget is the difference between how much they actually benefit from living in their home and how much they would benefit were restrictive zoning, minimum lot sizes, insufficient land taxes and other failures in the housing market corrected. This will vary widely depending on where one lives. The budget should be spent to aid those harmed by failures in the housing market, or in attempts to make the housing market more efficient. Since property markets are local and different groups are harmed by failures in each local market, how this budget is best spent will depend on local factors. The people to whom compensation is owed could be close by. In some markets, there is a large constituency of locals who suffer from housing insecurity or homelessness. In gentrifying areas, gentrifiers owe compensation to those who are displaced. Compensation could be owed to local renters who pay higher rents because of housing market failures. The people to whom compensation is owed could also be far away. On a national level, studies have suggested that if a few large cities had better zoning rules, then many people from other cities would move there for access to jobs and amenities, and if this happened, the country’s GDP would grow substantially because of improvements in the spatial allocation of human capital.[[24]](#footnote-24) Such people are prevented from moving now because of a lack of supply of housing. The lack of supply is not a natural fact, but a political choice made by voters (and specifically property owners) in the large cities. Hence, homeowners in the largest and most productive cities owe compensation to those who would have moved to the city if not for the failure in the housing market.

Indeed, satisfying remedial obligations stemming from failures in the housing market is perhaps the largest constituent of the reparative obligations white Americans owe to black Americans (see further Mills 1997; Dunham and Lawford-Smith 2017; and especially Kaplan and Valls 2007). Racially motivated failures in the housing market, as I noted above, harmed African Americans historically, and these harms continue as segregation persists today. An important contributor to the racial wealth gap is the exclusion of African Americans from neighborhoods protected by exclusionary zoning. These neighborhoods have seen property values explode in large part because of market failures. The reason why white homeowners need to compensate black people excluded from their neighborhoods is precisely because white homeowners financially benefitted from the very market failures that excluded blacks.

I have just worked through two examples of how the generalized MFA sheds light on the ethics of consumption. One theoretical question remains: does the generalized MFA provide an *exhaustive* characterization of the ethics of consumption? That is, can we explain everything that needs explaining about the things that should be consumed and in what manner they should be consumed by appealing to the resources of the generalized MFA? According to Heath, the MFA provides an exhaustive characterization of the ethical obligations of managers: firms can, and indeed, should, pursue any profit-making strategy so long as they do not violate the rules of the game. May consumers consume any good or service so long as their procurement of that good or service in the marketplace does not violate the rules of the game?

Some familiar debates in business ethics can be better understood in terms of the generalized MFA, such as debates about price gouging (Jaworski 2008), the ethics of global supply chains (Berkey 2022, 2023; Wenar 2008; Kingston 2021) and price discrimination (Elegido 2011, Moriarty 2021, Steinberg 2019). Other debates, however, concerning putatively illicit markets like markets for human body parts or for sexual labor (see further Maguire and Brown 2019, Brennan and Jaworski 2016, Satz 2010) are about an entirely different matter: the market demarcation problem. Some of the good things in life should not, or perhaps cannot, be distributed by markets. Which of life’s goods should be distributed by market mechanisms is a matter that is beyond the scope of this paper, as we will need resources from the rest of normative ethics and political philosophy to solve the market demarcation problem. But given that we have decided to distribute something through markets, the generalized MFA exhaustively characterizes our obligations with regard to that thing—it tells us how to correctly use markets.

**3.3. Failures in the Capital Markets**

Capital markets are similar to markets for goods and services: both are governed by the laws of supply and demand, and both can experience market failures due to concentration, information asymmetries and unpriced externalities. Most importantly for our purposes: efficiency is the implicit morality of both markets. I have just discussed the investment that is most consequential for most households: their own residence. But most households also own stocks, bonds or other securities in retirement plans, or benefit from pensions or annuities supported by returns on such assets.

There are two ways investors can be affected by market failures. First, the companies they invest in can conduct their businesses in a way that exploits market failures. Second, investors can be affected by imperfections in the capital markets themselves. Concentration in the capital markets can result in a market failure. If firms share beneficial owners, they are not sufficiently incentivized to compete with one another. An emerging literature at the intersection of finance and anti-trust has suggested that the increasing concentration of capital markets may have adverse anti-competitive effects.[[25]](#footnote-25) The government can also cause failures in the capital markets through central bank policy, most importantly by setting the interest rate above or below its natural rate, but also by subsidizing or bailing out capital market participants.

Let us return to the first way. In an efficient capital market, a company’s stock price is the discounted expectation of its future dividends. Thus, when a company makes profits from exploiting a market failure, its shareholders benefit from a higher stock price.[[26]](#footnote-26) Theory predicts that investors will hold the market portfolio, because this maximizes their risk-adjusted rate of return. With the widespread and still increasing adoption of low-cost index funds, more and more households are satisfying this prediction of financial theory. Consider such an investor. Most of their returns will be driven by profits made in a legitimate way, but some of the returns are due to the exploitation of market failures.

How can such an investor satisfy the requirements of the generalized MFA? As before, there are two options: avoidance and remediation. The former option is known as “divestment” in this context. The merits of this option will depend on a variety of factors. Divesting has three downsides. First, it reduces the degree to which one can benefit from diversification—the only free lunch in investing. Second, determining which of the tens of thousands of public companies around the world engage in business practices that exploit market failures is a monumental task that cannot be accomplished by individual investors. Finally, many companies make some of their profits by exploiting market failures, but make the rest of their profits by creating value. It is permissible for the investor to benefit from the latter but not the former, but there is no way to own only the legitimate parts of a large business enterprise.

Despite these concerns, divestment is an attractive option in some cases. First, recent decades have seen a proliferation of financial products aimed at screening out morally problematic companies. For instance, it is relatively easy to divest from fossil fuel companies by purchasing an ESG fund. These products, though they continue to improve, are a highly imperfect proxy and are usually quite expensive. Second, very large institutional investors—like university endowments, other non-profit institutions and pension funds—have the resources to construct portfolios that avoid many of the most ethically problematic investments. What’s more, due to their size, which gives them access to a larger variety of investment options, sacrificing some diversification costs very little, compared to individual investors. One downside, however, is that if large institutions divest, they can no longer use their voice in corporate governance to encourage managers to improve their behavior.

Now consider remediation. This is likely the best option for most individual investors. Investors can follow a variant of the procedure I outlined in the last section. First, they estimate the returns that they would have made if none of those returns were due to market failures. Then, subtracting this from the returns they actually made, they are left with their market failures budget from their investments, which must be spent on remediation.

In the consumption case, the parties to the transaction—firm and consumer—used the principle of proportional compensation to determine how the market failures budget was distributed between them. Unfortunately, investors cannot follow a similar procedure. The counterparty that they provide capital to is the firm itself, but just as investors are the residual claimants who are entitled to their firm’s profits, they are also responsible for the firm’s moral liabilities.

Could managers bear some of the remediation obligations? Managers are merely the employees of shareholders. Managers may have remediation obligations *qua* employees (more on this in 3.4). And since managers are often compensated with company stock to align their incentives with those of shareholders, they have obligations *qua* owners as well. But do managers *qua* managers have any remediation responsibilities for the profits they made for shareholders by exploiting market failures, or is the firm’s entire portion of the responsibility for remediation simply passed through directly to the shareholders who ultimately benefit from the exploitation of market failures?

Von Kriegstein (2016) suggests one way to think about this problem. He argues that the MFA does not apply to managers at all; rather, it applies to shareholders directly, and only applies to managers in virtue of the agency relationship that they stand in to shareholders (see further Mejia 2019, 2021; Goodpaster 1991). I agree with von Kriegstein’s basic approach, with the caveat that it is not only to shareholders that the MFA applies, but to all market participants. Managers are obligated not to operate their businesses in a way that exploits market failures in virtue of the fact that shareholders are obligated not to benefit from market failures. But if managers do so anyway, shareholders are thence obligated to either fire them, or, if this is not possible, to remediate the situation by using the market failures budget to compensate the harmed parties.

There is one further layer of complexity to add to this analysis. Paradoxically, managers may only have responsibility for remediation in their capacity as managers when the market for their role is *inefficient*. Let me explain. Ought implies can is an axiom of ethics, so if managers cannot do something, by modus tollens it is not the case that they ought to do that thing. Consider the CEO of a small oil company. He cannot unilaterally ensure that the firm complies with its obligations under the generalized MFA by ceasing to develop fossil fuels. If he tried to do this, he would be replaced immediately by another executive who would continue business operations as usual. This is because the market for corporate control for small oil companies is relatively efficient: if the people who control the company now (the current managers) are adopting a suboptimal strategy for making profits, it will be relatively easy for amoral activist investors to organize a hostile takeover and replace the management. If pressure from actual or potential shareholders forces managers to conduct their businesses in a way that exploits market failures, then the remediation obligations fall entirely on shareholders because managers themselves cannot fulfill them. Von Kriegstein (2016, 457) suggests that in such a situation, managers have reason to resign.

But sometimes the market for corporate control is less efficient. This may be the case, for instance, when the founder of the company is the CEO, or when the business is largely controlled by a single family, or when the market capitalization of the company is especially large, or when the company has adopted a non-traditional capital structure with classes of shares that have special voting rights, like most of the large tech companies today, as well as Berkshire Hathaway. In these cases, the CEO has a much wider latitude to deviate from what non-controlling and purely self-interested shareholders might regard as the optimal business strategy. If the business in question profits from market failures, then the CEO has an obligation to either avoid or remediate, because she can avoid or remediate and remain in the role. Hence, inefficient markets for corporate control leave managers with some of the obligations to avoid or remediate the harms that are caused by the business’s exploitation of market failures.

The efficiency of the market for corporate control is something that clearly comes in degrees. CEOs vary widely in their ability to correct the money-making wrongful conduct that their companies engage in without being fired by self-interested shareholders. Hence, the way that the responsibility for remediation is split between shareholders and management depends on the characteristics of the market for corporate control, since this market determines the scope of managers’ and shareholders’ abilities. In perfectly inefficient markets for corporate control (e.g., where the CEO holds a majority of the voting rights), managers have a wide scope to avoid or remediate problematic but lucrative conduct, so they are obligated to do this. But in perfectly efficient markets for corporate control, managers have no such ability, so all of the obligations fall on shareholders.

**3.4. Failures in the Labor Market**

Labor in a capitalist economy constitutes a market transaction. The labor market is quite different from the market for capital or for goods and services, but the generalized MFA still applies because we value labor markets for their ability to efficiently distribute talent. What’s more, the generalized MFA provides some novel insights for familiar debates about the ethics of labor, insights that unify it with other ethical issues in the marketplace.[[27]](#footnote-27)

The labor market works efficiently under a narrow set of conditions that rarely obtain. Take asymmetric information for instance. The employment relation is sometimes modeled using agency theory. The principal hires the agent to do some tasks. The agent wants to do these because they are compensated, but once the contract is formed, agents constantly face a choice between “working” and “shirking.” Since principals have to expend monitoring costs to ensure that agents are doing their jobs, they cannot prevent all shirking on the part of agents. Employers attempt to determine how hard a potential employee will work before they are hired. But employees possess much more information about their propensity to shirk than the prospective employer does. Shirking-prone employees can thus exploit the market failure of asymmetric information about worker effort in order to get better jobs than they would otherwise have. The generalized MFA implies that they should not do this. Workers should thus be willing to honestly disclose to employers how much and how hard they will work, so that information about their propensity to shirk becomes symmetrically distributed.

Failures in the labor market can cut the other way too, due to government subsidies that benefit some employers. Walmart, McDonalds and other low-wage employers have many employees who receive government assistance like SNAP, Medicaid and housing assistance. This allows these firms to pay below-subsistence wages to their employees, since the government subsidizes their nutrition, health and housing needs. Such firms benefit from a (government created) failure in the labor market, and earn unjust profits as a result. Exploiting this market failure to push down wages or benefits is impermissible according to the generalized MFA. Such firms should compensate taxpayers for subsidizing their labor costs.[[28]](#footnote-28)

One might think that the generalized MFA rules out labor unions, since they conspire to artificially raise the price of labor by eliminating competition on one side of the labor market. Don’t labor unions create failures in the labor market? This may be true of some labor unions, but many unions *correct* failures in the labor market (my analysis here is confined to private sector unions). Many labor unions form in monopsonistic labor markets, for instance, an industrial union that protects workers in a single factory town. Labor unions will not violate the generalized MFA if they improve the functionality of the labor market.[[29]](#footnote-29)

Some labor markets have artificially high barriers to entry protected by law or well-established custom. The professions exemplify this. Entering a career in law, medicine or academia requires many years of expensive training and certification. In academia, this is a well-established custom; in law and medicine, these barriers to entry are legally erected and protected by professional organizations. Entry into these labor markets is not only protected from competition domestically, but the government also limits the entry into U.S. professional labor markets by foreign professionals. Employees in professions with artificially high barriers to entry benefit from failures in the labor market. My analysis suggests that such professionals owe compensation to those harmed by these failures in the labor markets: would-be practitioners and consumers of professional services who have to pay higher prices. Perhaps we should understand the informal duties that professions usually impose on their members to engage in *pro bono* work as partially satisfying these obligations. Barriers to entry into non-professional careers created by occupational licensure are a significant market failure, one that can be given a similar treatment.

This last point can be expanded to learn a larger lesson. Most workers in developed countries benefit from the global system of immigration restrictions, one of the largest market distortions shaping the global economy today. Most of us would take a massive pay cut if not for this market failure (of our governments’ making). This means that workers in developed countries owe compensation to the workers in developing countries who were not allowed to migrate because of global immigration restrictions.[[30]](#footnote-30) This is one aspect of the three-pronged obligation that citizens of the global north owe to those in the global south: 1. Compensation for the harms of climate change (which will largely occur in the global south) 2. Compensation for immigration restrictions preventing people in the global south from migrating to the global north and 3. Compensation for our consumption of goods produced in the global south by unfair labor practices, stolen raw materials, etc. The fact that the generalized MFA can give a unified explanation of our duties pertaining to global justice shows the power of the approach.[[31]](#footnote-31)

The generalized MFA can also shed light on a traditional problem of business ethics: CEO compensation. Many believe that CEO compensation is too high, especially since the ratio of CEO to average worker pay has markedly increased since the 1970s. Some academic research suggests that this is because the labor market for executives is inefficient, even more so than typical labor markets. In a recent monograph, Alexander Pepper (2022) suggests that CEO pay is too high primarily because of such market failures. I do not have space to review his analysis here, but if my generalized MFA is correct and Pepper’s empirical work is on track, executives have a substantial market failures budget that they need to return to those harmed by their excessive compensation (other employees and the shareholders).

In this subsection, I have analyzed how the generalized MFA applies to the employment relation, by working through both theoretical aspects of employment and analyzing concrete failures in labor markets. Agents who benefit from failures in the labor market—and this could be either employees or firms—owe compensation to those harmed by failures in the labor market. Unfortunately, I have only been able to offer a sketch of the ethics of employment here due to space limitations, but hopefully it is enough to see that the approach gets correct results in a wide variety of cases. I hope that future research can provide a more comprehensive account of the ethics of employment and work based on the generalized MFA.

4. Conclusion

In this paper, I have argued that we should extend the MFA from the realm of managerial obligations to instead describe the norms of market participation as such. Market participants have a duty not to benefit from market failures; if they do, they expropriate resources that rightfully belong to someone else. Transacting in perfect markets is the gold standard for justice in exchange. Agents can comply with the generalized MFA either by avoiding transacting in markets with failures, or by remediating the harm they have done. I discussed how remediation expenses should be divided between the transacting parties, and I argued that transactors have a role-directed obligation to compensate those harmed by the market failure in question.

Here is one final upshot of this analysis. Some people primarily blame corporations for the carbon emissions that cause climate change, and other social ills that are the result of market failures, like misinformation or the obesity and opioid epidemics. Others primarily blame individuals who live fossil fuel dependent lifestyles, or who otherwise participate in markets with failures. This difference in the location of responsibility for the social ills that will inevitably result from an imperfect capitalist economy is a matter of perennial debate. My analysis suggests a principled way to cut this gordian knot. More precisely, it suggests a principled way to allocate responsibility for these social ills among the participants in the imperfect markets that cause them. The generalized MFA suggests that the allocation of responsibility substantially depends on industry structure, since this determines the allocation of surplus among the transacting parties. The system of remediation that I have suggested is also feasible for businesses and corporations to adopt, at least in approximation, and this is a key advantage of my account over the traditional MFA. By allocating responsibility proportionally among consumers, investors, manager, etc., the generalized MFA distributes responsibility so that it is economically feasible for each of these parties to satisfy their market obligations, rather than placing all of the responsibility for the imperfections in our economy on managers.

There is more work to be done though, in order to better understand the generalized MFA’s implications in an even wider variety of market roles and across an even wider range of markets. I hope that this paper will spur further research on the ethics of market participation under the non-ideal conditions that we actually face.[[32]](#footnote-32)

Technical Appendix: Formalizing the Proportional Compensation Principle

The market failures budget must be paid to compensate those harmed by the market failure. But there are two different ways to formally specify how much compensation is owed by each transacting party. These two ways correspond to two baselines by which we can measure how much benefit the transacting parties enjoyed. The degree to which someone *benefits* from something is the difference in their well-being between the actual world and the relevant baseline world in which they do not have the thing. But what is the relevant baseline? There are two obvious proposals. The first baseline is the state in which the transaction did not occur. The second baseline is the state in which the market was ideally regulated so as to eliminate all market failures.

Consider the following table, depicting the surplus enjoyed by three parties—the two transactors and a third party—in three different states of the world—the actual state, the ideally regulated state and the state in which no transaction occurs.

|  |  |  |  |
| --- | --- | --- | --- |
|  | Transactor 1 | Transactor 2 | Third Party |
| Actual world | w | y | - h |
| Ideally regulated world | x | z | 0 |
| No transaction world | 0 | 0 | 0 |

By transacting in a market where there is a market failure, the transacting parties have expropriated the third party by imposing a cost of *h* on them. So exactly *h* needs to be paid, by the transacting parties, to the harmed third parties. But what percentage of *h* should transactor 1 pay and what percentage of *h* should transactor 2 pay? There are two plausible views:

*Actual Surplus View*: each party has to pay in proportion to the actual surplus they enjoy. Transactor 1 pays h \* (w/w+y) and transactor 2 pays h \* (y/w+y).

*Counterfactual surplus view*: each party has to pay in proportion to how much more of the surplus they have in the actual world than they would have had in the ideal world. Transactor 1 pays h \* (w-x)/[(w+y) – (x+z)] and transactor 2 pays h \* (y-z)/[(w+y) – (x+z)].

These views will converge in the majority of cases. They will converge in cases in which avoidance is to be preferred over remediation: in such cases the no transaction world is the ideally regulated world. They will also converge in cases where Pigouvian taxes and subsidies (and other regulations to correct market failures), do not alter the distribution of the surplus between transacting parties. This occurs when supply and demand curves are linear.

But the two views do come apart in some cases. We should favor the counterfactual surplus view in these cases. The amount that the transactors benefit *from* *the transaction* is *w* and *y*, respectively—it is how much better-off they are then they would have been had the transaction not occurred. But the amount that the transactors benefit *from* *the market failure* is *w – x* and *y – z*, respectively—it is how much better-off they are than they would have been had they transacted in an efficient market. The motivation for the MFA is that transactors should not benefit *from market failures*. The ideally regulated world is the morally relevant baseline; that is the world in which everyone gets what they are entitled to.

We should favor a compensation principle that gets us as close as possible to the distribution in the ideally regulated world. The counterfactual surplus view does that. The best-case scenario is one in which all parties end up with exactly what they would have in the ideal world. This is possible only if there is no deadweight loss. Transactor 1 would pay *w – x* to the third party, transactor 2 would pay *y – z* to the third party, and the third party would receive *w + y – x – z = h*.

But if there is deadweight loss, then after the compensation is paid, at least one of the transacting parties or the third party will end up with less than they would have had in the ideally regulated baseline. The counterfactual surplus view is the unique compensation principle that ensures that all parties, after the compensation is paid, receive an amount proportional to what they would have gotten in the ideally regulated world. In other words, this compensation principle preserves the ideal ratio of how benefits and burdens are distributed among all parties, though, due to deadweight loss, giving each party the amount they would have in the ideal world is not possible. Here is what happens if the counterfactual surplus view is employed to compute remediation obligations:

* Transactor 1 pays *h \* (w-x)/[(w+y) – (x+z)]* and transactor 2 pays *h\* (y-z)/[(w+y) – (x+z)]*. The third party receives *h*.
* After the compensation, transactor 1 is left with *w – (h \* (w-x)/[(w+y) – (x+z)])* and transactor 2 is left with *y – (h\* (y-z)/[(w+y) – (x+z)])*. The third party is left with 0. These amounts are proportional to what the three parties receive in the ideal world.[[33]](#footnote-33)

Since the third party is not harmed in the ideally regulated world, they must be fully compensated in the amount of *h* in order to preserve the ideal proportion. The transacting parties receive less in absolute terms than they would have gotten in the ideally regulated world, but the remaining surplus is distributed between them in proportion to how much surplus they would have had in the ideally regulated world.

This rule leaves transactors as close as is possible to what they are entitled to, consistent with paying full compensation to those harmed by the market failure, so it is the only rule that is fair to all parties involved.

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1. This is shown formally by the first welfare theorem. [↑](#footnote-ref-1)
2. In other words, participating in the market by violating one of the rules of the game is a normatively self-defeating action. This point is best understood in Kantian terms: market participants who violate the MFA could not will that their conduct be universalized, because markets as a system of social organization would cease to be functional if everyone profited unjustly from market failures. [↑](#footnote-ref-2)
3. This injunction, of course, needs to be carefully specified. For instance, if one firm successfully enters an industry that was previously a monopoly, then they have benefited from a market failure (viz., the fact that the industry was previously a monopoly). Or, if a trader has carefully researched a company and trades on a mispricing that she has discovered, the trader benefits from inefficiencies in the capital markets. Such conduct should not be condemned, though because it makes markets more efficient, not less. So we should not say that these agents have acted impermissibly, since, indeed, this is behavior that should be promoted. A much better second pass is that firms should not profit from market failures when the conduct that causes the profit also maintains or exacerbates the extent of the market failure. Heath (2023) treats this issue at greater length. [↑](#footnote-ref-3)
4. Indeed, on most neoclassical views of the firm, like Coase’s, firms find themselves in an external environment organized by the price system, but internally, resources are distributed by a command-and-control system (see, e.g., Anderson 2017). Given that managers lead firms both through the external environment and lead them internally, perhaps we should expect a characterization of the ethics of the managerial role to include both the principles of the MFA and principles that reflect how the managerial role is situated in a firm’s internal system of governance. [↑](#footnote-ref-4)
5. Heath (2014, 37). [↑](#footnote-ref-5)
6. <https://thepointsguy.com/news/business-class-ethical-climate-change/> [↑](#footnote-ref-6)
7. In the case of negative externalities that we have been discussing, the market failures budget is determined by the unpriced social cost, and those harmed by the market failure are those upon whom the negative externality falls. For other market failures, like asymmetric information, one of the transacting parties will be the party that is harmed by the market failure. For still other market failures, like monopoly power and government distortions of prices through subsidies, taxes, price floors and price ceilings, the harmed parties may include people who did not transact who otherwise would have transacted in the absence of the distortion in prices. [↑](#footnote-ref-7)
8. If you want to identify these cases on a supply and demand graph, they are the points on the demand curve between the actual supply curve and the supply curve once a Pigouvian tax or subsidy is imposed. [↑](#footnote-ref-8)
9. Heath’s (2018b) treatment of the race to the ethical bottom does not answer the argument as formulated here in terms of the “ought implies can” principle, for Heath argues merely that firms have an *excuse* for participating in the race to the ethical bottom, not that they ought not do so. [↑](#footnote-ref-9)
10. Hare (2012) provides a similar argument in an analysis of our obligations to “merely statistical people.” [↑](#footnote-ref-10)
11. Nordhaus (2015). [↑](#footnote-ref-11)
12. IAE (2023). [↑](#footnote-ref-12)
13. <https://8billiontrees.com/carbon-offsets-credits/reduce-carbon-footprint/average-footprint-per-person/american/> [↑](#footnote-ref-13)
14. Here is a back of the envelope calculation. Big oil made $200 billion in profit in 2022, an unprecedented sum. Suppose, conservatively, that Americans in sum only received $680 billion in consumer surplus from consuming fossil fuels in that year ($2,000 per person). In that case, consumers would be responsible for (680/880 = ) 77% of the market failures budget for carbon, or about $2,279 for the average consumer. This strikes me as a reasonable amount to have to pay for our carbon-fueled lifestyles. This analysis excludes federal and state gas taxes, which are largely used to fund the depreciation of the transportation infrastructure—another externality. [↑](#footnote-ref-14)
15. Microsoft has recently advertised a commitment of the latter kind (they aim to remove more than they emitted): <https://blogs.microsoft.com/blog/2020/01/16/microsoft-will-be-carbon-negative-by-2030/>. Even Microsoft, often regarded as one of the greenest large companies, badly undershoots their climate obligations according to my account, as I demonstrate below. [↑](#footnote-ref-15)
16. In other words, Barry and Cullity are possibilists; they think that other agents’ failure to satisfy their moral obligations changes your moral obligations. I am an actualist; I think that your moral obligations depend only on what other agents actually do, not what they should do. [↑](#footnote-ref-16)
17. For quick primers on these technologies, see <https://www.youtube.com/watch?v=dRvkOFdfW7k>; <https://www.youtube.com/watch?v=X11xoGeX0s8>, see also: <https://www.technologyreview.com/2021/06/24/1027083/what-it-will-take-to-achieve-affordable-carbon-removal/> [↑](#footnote-ref-17)
18. With this analysis in hand, we can see why even Microsoft’s ambitious pledge does not satisfy its climate obligations. Microsoft has pledged just .1% of its annual revenue for carbon removal commitments from now until the end of the decade, $200 million. Microsoft emitted around 8 million tons of carbon this year, and with a social cost of carbon at $185 per ton, my analysis suggest that they should be paying $1.48 billion for just the year 2022 (this cost, of course, is divided between the firm and its customers). Instead, they are paying just about $28 million per year. Hence, my analysis suggests that Microsoft is paying just 2% of what it owes. Most other companies pay even less. Microsoft’s plans will remove the amount of carbon that it has historically emitted, but Microsoft mistakenly thinks that this is morally sufficient. Unfortunately, it will come nowhere close to paying the social cost of all of the carbon that it has used. This discrepancy is only possible because other firms and individuals fail to offset at all, and in this particular case, because Microsoft achieved a “first-mover advantage” in cheaply procuring large carbon removal contracts from carbon removal startups. This advantage is something that Microsoft’s former Chief Environmental Officer is quite clear about in an interview on Harvard Business School’s *Climate Rising* podcast: <https://www.hbs.edu/environment/podcast/Pages/podcast-details.aspx?episode=7332431994>. [↑](#footnote-ref-18)
19. Though it seems more like a good, economists typically classify housing as a service. [↑](#footnote-ref-19)
20. This fact is of central importance to the Georgist tradition, which advocates for public ownership of all natural resources for precisely these reasons. [↑](#footnote-ref-20)
21. On the spatial allocation of opportunity, see Bergman et al. (2023). [↑](#footnote-ref-21)
22. Setting up an argument by analogy here is appropriate as well. Suppose that publicly traded REITs owned all of the homes in a city, and then the managers lobbied the local government to adopt restrictive zoning policies that practically eliminate new supply. The MFA would deem this conduct highly unethical. The generalized MFA says that this conduct is unethical whether it is done by REIT managers or homeowners. [↑](#footnote-ref-22)
23. Perhaps some residual responsibility will accrue to the mortgage provider depending on how exactly the generalized MFA is extended to the mortgage finance market, something I do not have space to develop here. [↑](#footnote-ref-23)
24. Hsieh and Moretti (2019). [↑](#footnote-ref-24)
25. See Azar et al (2015) and Azar and Schmalz (2017) for two canonical findings. Forrester (manuscript) contains an analysis of this literature and examines the potential effects on democracy of implementing social and environmental policy through concentrated capital market institutions. [↑](#footnote-ref-25)
26. According to modern portfolio theory, investors don’t just benefit by higher returns; their utility functions are sensitive to two other characteristics of securities: their risk (volatility) and their correlation with other securities. In principle, investors could benefit from market failures through these channels as well. [↑](#footnote-ref-26)
27. Heath (2018a) argues that though efficient labor markets channel labor to its highest value use, many people think that this property is not sufficient to justify markets in labor if they treat workers in an unfair way by giving them more or less than we think they deserve. Heath cautions against such a criticism, but does not apply the market failures approach to labor in the way that I sketch in this section. [↑](#footnote-ref-27)
28. Minimum wages, too, are government-created failures in the labor market. My analysis suggests that the beneficiaries of minimum wages (minimum wage workers) should compensate those harmed by minimum wage laws (primarily the unemployed). [↑](#footnote-ref-28)
29. See Heath (2014, 195-196) for a related discussion. [↑](#footnote-ref-29)
30. The magnitude of these obligations will be highly sector-specific. [↑](#footnote-ref-30)
31. Many of the examples in this paragraph, and this section, are situated at the intersection of markets and politics. Immigration restrictions are a political choice made by democratic states, as is the aid we give to needy families (for further analysis of market failures caused by the state, see Jaworski 2013). But these choices also constitute market failures. To know whether these choices are ultimately permissible, we will need to situate the generalized MFA in a broader approach to liberal political philosophy. I cannot engage in such an analysis here, but see Singer (2018), (2019) for compelling treatments of some of the relevant issues. [↑](#footnote-ref-31)
32. Thanks to Dan Greco, Shelly Kagan, Hasko von Kriegstein and Harry Lloyd for helpful comments and conversations. [↑](#footnote-ref-32)
33. The proof of this last claim is a simple, though lengthy, algebraic exercise that I will not reproduce here. [↑](#footnote-ref-33)