# Market harms and market benefits ${ }^{1}$ 

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#### Abstract

Our actions in the marketplace often harm others. For instance, buying plane tickets contributes to climate change and buying meat often harms farmed animals. But in almost every market interaction we impose harms of another, widely overlooked, kind: market harms. These are harms inflicted via changes to the goods and/or prices available to others in that market. (Similarly, market benefits are those conferred in the same manner.) On the face of it, such harms and benefits may seem morally irrelevant, as philosophers from John Stuart Mill to Ronald Dworkin have argued. But, when concentrated on the global poor, there is a compelling case to be made that market harms and benefits are important moral considerations, with major practical implications. Even in the everyday choices of typical consumers, these harms and benefits are often considerable: for instance, spending just $\$ 10$ on wheat products rather than quinoa redistributes roughly $\$ 19-81$ (in expectation) from poor to rich. In light of these effects, I argue that many of us are morally required to drastically change our consumption habits.


Keywords: market harms; pecuniary externalities; ethical consumption; externalities.

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## 1 Market harms in the wild

Until the early 2000s, grain collected from the quinoa plant was eaten almost exclusively in its native Peru and Bolivia. But that changed rapidly as western shoppers learned of its nutritional properties-between 2005 and 2015, the amount of quinoa shipped out of Peru and Bolivia grew more than tenfold (FAO, 2020a). With residents of wealthy countries demanding more and more of it, the price of quinoa rocketed from US\$350 per tonne to a peak of \$2,770 (FAO, 2020b). ${ }^{2}$

How did this price rise affect those Peruvians and Bolivians for whom quinoa was a key staple food? Quinoa consumption in those countries plummeted (Collyns, 2013). In Peruvian marketplaces, it sold for more than rice or even chicken, resulting in few locals being able to afford it. Some commentators predicted that this would lead to widespread malnutrition among the poorest in those countries (ibid.; Blythman, 2013). And so it seemed that wealthy western quinoa eaters had imposed great harm by buying so much quinoa.

But that is just one side of quinoa's story. Although the price rise may have harmed those who consumed quinoa, it also benefited those who produced it. The income of quinoa farmers rose dramatically during this time (Stevens, 2017; Bellemare et al., 2018), as did their self-reported life satisfaction (ibid.). And it so happens that quinoa farmers are among the poorest people in Peru and Bolivia, while quinoa consumers are typically the wealthiest-the average income of a quinoa consumer in Peru is approximately three times that of a quinoa farmer (Bellemare et al., 2016, 2018). So taking a dollar from a wealthy quinoa consumer and giving it to a poor quinoa farmer achieves a more just distribution of wealth. And the dollar lost by the consumer constitutes a harm much smaller than the benefit gained by the farmer-the latter makes a far greater difference to the recipient's opportunities, material wellbeing, and overall welfare. So, even if the price rise had reduced the wealth of those local quinoa consumers, it would still have produced a plausibly better outcome as long as it increased the farmers' wealth by at least as much. But, as it turns out, local quinoa consumers weren't even harmed by the rise in quinoa prices-economists have found that even they, as a group, ended up wealthier due to the influx of money into their communities (Bellemare et al., 2016). So the western quinoa buyers who sparked that price rise didn't just inflict harm; they also conferred considerable benefits on the poor of Peru and Bolivia. Indeed, it seems the benefits were far greater in magnitude than the harms.

Another dramatic price rise occurred, with less cheerful results, in the Indian province of Bengal during the Second World War. In 1943, Bengal saw astonishing demand for rice that year-a result of wartime hoarding, panic buying, speculation, and inflation (ibid.). The price of the grain rose dramatically, leaving many of Bengal's poorest-for whom rice was the cheapest available

[^1]staple food-unable to afford to meet their caloric needs. In the ensuing famine, approximately 3 million people died (Devereux, 2000). This occurred despite Bengal producing its largest rice crop to date that year (Sen, 1983). How? By buying excess rice, the hoarders, panic buyers, and speculators of Bengal drove up the price, priced the poor out of the rice they needed, and thereby inflicted enormous harm on their fellow, more vulnerable, consumers.

Yet another demand-driven price rise occurred globally for various staple foods in 2007 and 2008. Much like Bengal did for rice in 1943, the world saw its largest wheat harvest to date in 2008 (FAO, 2020b). But this was accompanied by astonishing demand for wheat, along with rice, corn, and soybeans. Where did this increased demand come from? Largely from wealthy western investors. In the midst of a global recession, investors poured money into commodities like wheat, which were seen as safe investments (Kaufman, 2010; Allen, 2010). Among other causes, this led to a sharp rise in the prices of various staple foods. And that price rise pushed 40 million people into hunger (FAO, 2008) and triggered riots in over thirty countries (Mittal, 2009). Yet again, some market participants did harm to others through their purchases.

In these cases, was the behaviour of those consumers morally wrong? And, if so, are consumers more broadly at risk of committing similar wrongs? These are the questions that I wish to answer here.

## 2 What are market harms and market benefits?

In each of the three scenarios above, some individuals inflict harm (and/or confer benefits) on others, not directly but instead through a market mechanism. They inflict market harms: harms that agents impose by making a market transaction and thereby changing the market prices and/or goods available to the victim (for the worse). Similarly, market benefits are benefits that agents impose by making a market transaction and thereby changing the market prices and/or goods available to the beneficiary (for the better).

Not all harms and benefits arising from consumer choices are market harms and benefits. Many such choices impose externalities, but not all such externalities do harm or benefit via changing prices. For illustration, suppose you buy some petroleum and use it to fuel a joyride. By doing so, you emit carbon dioxide, contributing to global warming and harming future people. This is an example of what economists call a non-pecuniary, or real, externality. But those are not my focus here. Note that, by buying that fuel, you might cause the petrol station to run out and deprive other customers of petrol. This would be an example of a pecuniary externality. Only pecuniary externalities-those
that alter the market for other participants-can constitute market harms and market benefits.
Can the fact that an action imposes a market harm give us moral reason not to perform it? Can the fact that it imposes a market benefit give us moral reason to perform it? And can these reasons be decisive-ought we buy, or not buy, certain goods because of the market harms and benefits they impose? 3

To date, few philosophers have considered the moral significance of market harms or benefits. Most of those who do say no to the above-they argue that the fact that an action imposes a market harm (or benefit) gives us no additional moral reasons at all. $4^{5}$ For instance, John Stuart Mill takes this position about not just market harms but a broader class of harms imposed through competition.
... whoever is preferred to another in any contest for an object which both desire, reaps benefit from the loss of others, from their wasted exertion and their disappointment. But it is, by common admission, better for the general interest of mankind, that persons should pursue their objects undeterred by this sort of consequences. In other words, society admits no right, either legal or moral, in the disappointed competitors, to immunity from this kind of suffering (Mill, 1977, p. 105)

A century later, while coining the term market harm, Judith Jarvis Thomson argues briefly that imposing such a harm violates no right of the victim:

There is a kind of harm that, when inflicted by one person on another, does not infringe a right. I have in mind what might be called "market harms." Suppose, for example, that you make lace and now have a cupboardful ready to bring to market tomorrow. This afternoon, I invent a way of making lace cheaply, by machine... I thereby cause you a market harm: I cause a drop in the [monetary] value of your lace. It seems plain enough that I infringe no right of yours in doing so. (Thomson, 1986, p. 160)

Ronald Dworkin later reaches much the same conclusion as Mill, arguing that the fact that an

[^2]action imposes a market harm cannot render it morally prohibited:

No one could even begin to lead a life if bare competition harm were forbidden. We live our lives mostly like swimmers in separate demarcated lanes ... each person may concentrate on swimming his own race without concern for the fact that if he wins, another person must therefore lose. ... we [must] accept the inevitability and permissibility of competition harm. (Dworkin, 2011, p. 287)

In the situations that each of Mill, Thomson, and Dworkin have in mind, it does seem plausible that agents act permissibly. In situations where Mill's assumption is correct-where better outcomes result if we simply ignore market harms-perhaps agents who impose them act permissibly. And in situations analogous to Thomson's lace-making case or Dworkin's swimming race, it seems plausible there too that the agents' behaviour is unproblematic. There are several characteristics of those cases that make this plausible. The first: the stakes are low-the inventor and the swimmer inflict only modest harm on their victims (or so we might imagine). The second: the agents' interactions with their victims are what we might call zero-sum-those harms are each accompanied by benefits to the agent themselves, which are plausibly just as great. ${ }^{6}$ The third: in both cases, the victim would gladly inflict similar harm on the agent-the rival lace producer plans to bring their lace to market tomorrow and the rival swimmer is trying to win the race, thereby competing with the agent and attempting to harm them too. In cases sharing all three characteristics-where the stakes are low, the harms and benefits are balanced, and the victim seeks to do similar harm to the agent-I am sympathetic to the claim that we do no wrong in imposing market harms. And this is all the more plausible if doing so brings about an overall better outcome, as Mill envisages, and/or if it would be quite demanding on us to avoid such harms, as Dworkin suggests.

Perhaps Mill, Thomson, and Dworkin are right about the market harms in these cases-that they do not give us decisive moral reason against performing the actions that produce them. But the same is not true of all market harms. In other, more representative, situations there is a strong case to be made that both market harms and market benefits give us moral reasons. As I will argue, in some key cases, they give us decisive moral reasons to buy, or refrain from buying, certain goods.

Thomson and Dworkin's cases are unrepresentative because, in practice, interactions that produce market harms and benefits are often much higher in their stakes, often fail to be zerosum (or positive- sum), and often lack a victim who is freely trying to do similar harm. In practice, the market harms we impose are less like the harm imposed when one swimmer

[^3] impermissible.
outswims another and more like those described above involving quinoa, Bengali rice, and 2008era wheat. Buy a kilogram of wheat and you do not merely deprive one competitor of that food; you may also influence the price of wheat, influencing the incomes of wheat farmers, as well as how much the many thousands of other consumers of wheat must pay (see Section 3). If those consumers or producers include many of the global poor, for them your purchase may make the difference between being able and unable to afford basic necessities (see Section 4). So, the harm and benefit you cause may be far greater-and so the stakes far higher-than in Dworkin's swimming race. As well, those harms and benefits may no longer be zero-sum, since the consumers may be far poorer or richer than the producers; and, if those harmed are far poorer than you, they would not be in a position to do comparable harm to you. So, such cases may easily fail to be morally equivalent to Dworkin's swimming race and Thomson's lace-making scenario.

In practice, just how high are the stakes-how great are these harms and benefits? As I show in the next two sections, starting with a toy example and moving on to practical examples involving goods like quinoa and wheat, they can be considerable. For instance, from what we know about the supply and demand of quinoa, it can be shown that for every additional US\$10 you spend on it, you cause the (typically rich) consumers of quinoa to lose at least $\$ 13.90$ (in expectation), and the (typically poor) producers to gain the same amount (see Section 4). And, for every $\$ 10$ spent on wheat, you take somewhere between $\$ 5$ and $\$ 67$ from the poor and give it to the rich. These are significant amounts for just $\$ 10$ spent. And especially when taken from (or given to) the poor, these amounts will correspond to significant harms (benefits) and significant losses (gains) in wellbeing.

Given that everyday purchases often result in such large transfers of money (at least in expectation), and that these transfers often flow from rich to poor (or vice versa), there is a strong case to be made that such market harms and benefits are often morally relevant. In Section 5, I argue that such harms and benefits give individuals ${ }^{7}$ like us decisive moral reason to buy (or forego buying) certain goods, at least in situations where we are otherwise close to indifferent between our options. I argue that we are morally prohibited from buying certain goodsincluding wheat, rice, soybeans, and lentils-at least when there is some less harmful alternative that we prefer no less. And we are morally required to buy certain other goods-including avocados, bananas, cashew nuts, tea, and quinoa-at least when we are close to indifferent between buying them and going without. The case for each of these verdicts is robust across a variety of plausible moral theories, as well as resistant to the most serious objections (see Section 6).

[^4]In short, I aim to show that market harms matter morally, as do market benefits. We may not simply ignore the harms we do just because we do them through market mechanisms; we are not permitted to impose great harm on the poor just because we do so through our purchasing choices. Further, I aim to show that such harms and benefits matter in practice, and matter a great deal- given what we know about certain goods, many of us ought to drastically change what we choose to put in our shopping baskets.

## 3 A toy case

To illustrate the market harms and benefits produced in our everyday purchases, consider the following toy case.

Suppose you find yourself at a local farmers' market, standing before a stall selling applesindeed, the farmer at this stall is the only apple seller in your town. You face a decision between buying an apple for $\$ 1$ and going without. And you are close to indifferent between the two options-you would like an apple to eat but, to roughly the same extent, you would like to save the $\$ 1$ to spend on other goods.

Buying the apple can result in any of three possible outcomes. The first is that the farmer sells an extra apple that day (and makes no change to their pricing). If they otherwise would have had apples leftover at the end of the day, your purchase would typically cause one fewer apple to go to waste. The farmer would take $\$ 1$ more in revenue, and you would gain an apple and lose $\$ 1$, relative to if you didn't buy the apple. Your action would have no effect on other apple buyers (except that, if you took a particularly nice-looking apple, later customers may get less nice-looking ones). So, you would have benefited the farmer at little cost to anyone.

The second possible outcome is that the farmer sells the same number of apples that day (and makes no change to their pricing). If the farmer would otherwise have sold out by the end of the day, your purchase would not change that fact. But it would cause them to run out one apple sooner, and so some later customer will miss out on an apple. The farmer is unaffected, you gain an apple and lose $\$ 1$, and some other customer saves $\$ 1$ but misses out on an apple (which they prefer to purchase). This outcome is similar to those described in both Thomson's lace example and Dworkin's swimmer example-in those examples and here, your action harms someone and, at best, benefits only you.

But there is a third possible outcome, in which your action may have a far greater effect (and which Thomson and Dworkin neglect). Your additional apple purchase may make result in the farmer noticing that apples are selling better than anticipated, and infer that demand for apples is greater than they expected. The astute farmer would realise that the equilibrium price for apples is
higher than what they are charging and raise the price accordingly. In this case, you would get your apple for $\$ 1$, other customers would then pay more for their apples, and the farmer would earn more. Through your purchase, you would effectively take some money from apple buyers and give some additional money to the apple seller. And, as we will see below, the amount of money can be considerable.

To better understand this third possible outcome, consider the standard model of supply and demand that an economist would use to describe the situation. Prices in the local apple market in a given time period are determined by both a supply curve and demand curve (both illustrated below). ${ }^{8}$ The supply curve describes the quantity of apples that the farmer would produce if they could sell them at a given price. Meanwhile, the demand curve describes the total quantity of apples that marketgoers would buy at a given price. The price and the quantity of apples sold in the given time period ${ }^{9}$ are jointly determined by these two curves-the farmer will tend to sell their apples at the equilibrium price, corresponding to where the curves meet, which here is $\$ 1$ per apple. Note that this price determines the farmer's total revenue (given by the shaded area below), which equals the quantity of apples sold $\left(Q_{1}\right)$ multiplied by the price per apple. The price also determines their profit, which equals their revenue minus the cost of producing all of those apples, and so matches the portion of the shaded area above the supply curve. ${ }^{10}$


[^5]In choosing whether to buy an apple, you determine where the demand curve will lie. Choose to buy the apple for $\$ 1$ and you produce a small demand shock-that is, you shift the demand curve across-such that the quantity demanded at $\$ 1$ is one apple greater than it would otherwise be. This raises the equilibrium price for apples (by some $\Delta P$ ), and so too the amount of money the farmer makes from selling them. ${ }^{11}$


At this new price, the farmer's total revenue would be greater. It wouldn't just be the light grey area from above; it would now equal the sum of all three shaded areas. This increase would be made up of two components. The first is the extra revenue the farmer gains from selling more apples, given by the area of the dark grey rectangle to the right. Roughly, this corresponds to the money you pay the farmer for your apple. ${ }^{12}$ As you may notice, very little of this area lies above the supply curve, so it would add little to the farmer's profit. ${ }^{13}$ Meanwhile, the second component is the extra revenue the farmer gains from selling those other apples for a higher price, given by the area of the black horizontal rectangle. This extra revenue would be pure profit for the farmer, since those apples would cost the same to produce but now sell for more. This would be at the expense of apple consumers-they would pay more for the same number of apples. In dollar terms, this would cost apple consumers (excluding yourself) the same amount as it benefits the farmer, corresponding to the area shaded black. So, your apple purchase would result in a transfer of money from the apple buyers to the apple producer.

How big would this transfer be? This depends on the supply and demand curves. But, if you buy only small numbers of apples, the necessary information about those curves is captured by

[^6]two key measures: apples' elasticity of demand $\left(e_{d}\right)$ and elasticity of supply $\left(e_{s}\right)$. These are measures of just how much the quantity demanded, or quantity supplied, changes in response to changes in price. If we know these, then we can calculate the amount transferred ( $A$ ) from apple buyers to the apple farmer for every $\$ S$ you spend on apples ${ }^{14}$ :
$$
\mathrm{A}=\Delta \mathrm{P} \times \mathrm{Q}_{1} \approx \frac{S}{e_{s}+\left|e_{d}\right|}
$$

If $e_{s}$ and $e_{d}$ are small enough-if apples are sufficiently inelastic in terms of both supply and demand-this amount can be enormous. A purchase of $\$ 10$ worth of apples could lead to a transfer of tens, hundreds, or even thousands of dollars from consumers to the farmer. Indeed, the amount can be arbitrarily large. And such transfers may translate to enormous harms and benefits (by any plausible account of harms and benefits), all the more significant if at least some of those affected are extremely poor: take thousands of dollars from poor consumers (or producers) and you reduce what they can spend on food, medicines, and shelter.

But this occurs in only one of three possible outcomes of your purchase of the apple. You might wonder: is that outcome remotely likely? The standard economic model may predict that it always occurs, but this model is somewhat unrealistic. It assumes that both the supply and demand curves are perfectly smooth and strictly increasing and decreasing, respectively. This implies that any change in price will lead to some change in the quantity demanded and the quantity supplied, but it often won't. That assumption also implies that any demand or supply shock-any shift in either curve, such as that which you produce by choosing to buy an apple-will lead to some change in both price and quantity. But, again, it often won't-for instance, the farmer often won't notice the unexpectedly high demand for apples, nor will they change the price accordingly. Often, the purchase of one additional apple will make no difference whatsoever to the price ( $c f$ Budolfson, 2019).

We can relax these assumptions. In practice, the correct supply and demand curves will be step functions: they remain flat for some interval and then jump up as some precise threshold is reached (as illustrated below). At most price equilibria, buy one additional apple and the price

14 The area of the black rectangle above is given by $A=\Delta P \times Q_{1}$. But how do we calculate the change in price, $\Delta P$ ? We can use the equations for elasticity of supply and elasticity of demand:

$$
e_{s}=\frac{\Delta Q / Q_{1}}{\Delta_{P}} / P_{1} \text { and } e_{d}=\frac{\begin{array}{c}
\Delta_{Q}-\Delta_{1} \\
Q_{1}+\Delta_{-1} \\
\Delta P
\end{array} P_{1}}{\Delta_{1}}
$$

(where $P_{1}$ and $Q_{1}$ are the initial price and quantity, $\Delta P$ and $\Delta Q$ the respective changes in each, and $\Delta_{1}$ the additional quantity that you choose to buy).
Expressed in terms of $e_{s}$ and $e_{d}$, the area of the rectangle becomes:

$$
\begin{aligned}
& \text { ctangle becomes: } \\
& \qquad \begin{array}{c}
A=\Delta P \times Q_{1}=\frac{P_{1} \Delta_{1}}{Q_{1} e_{s}+\left|e_{d}\right|\left(Q_{1}+\Delta_{1}\right)} \times Q_{1} \\
=\frac{P_{1} \Delta_{1}}{e_{s}+\left|e_{d}\right|+\frac{\Delta_{1}\left|e_{d}\right|}{Q_{1}}}
\end{array}
\end{aligned}
$$

Note that the numerator will be approximated by $S$, the amount you spend. And, in practice, $Q_{1}$ will be extremely large, making $\frac{\left.\Delta_{1}\right|^{e} d \mid}{Q_{1}}$ close to o. So, $A$ will be approximated by $\frac{s}{e_{s}+{ }^{e} d \mid}$.
won't change. But buy 1,000 additional apples and producers will surely notice, and change their prices by a lot (see Kagan, 2011). (Likewise, change the price by $\$ 0.01$ per apple and the farmer usually won't change the number of apples they produce; but go from $\$ 1$ to $\$ 5$ per apple and they'll almost certainly start producing more of them! ${ }^{15}$


Whether your apple purchase makes any difference to the price will depend on the exact position of that next step in the supply function. But, in practice, you the agent will have no idea where that next step is, nor how far it is from the quantity sold. For instance, perhaps there is a large step on the graph every 1,000 apples (as we move right on the horizontal axis). If so, you will have no idea where in the interval of o to 999 apples current apple sales lie; all positions in the interval are equally likely. From your perspective, you should place a probability of 1 in 1,000 on each such quantity of apples, including 999 apples. ${ }^{16}$ So you should place a probability of 1 in 1,000 on your purchase of a single apple pushing demand over the threshold necessary to trigger a price rise-the same price rise that would result from 1,000 additional apples sold if the supply curve were the smooth and strictly increasing one that appeared above. So, in expectation at least, buying one additional apple results in a price change equal to that predicted by the unrealistic model above.

Likewise, in expectation, the amount transferred from apple buyers to apple producers is precisely the amount predicted above, which can be arbitrarily large. So, even if we adopt a model with realistic supply and demand curves, your action of buying one additional apple still produces a large transfer from consumers to producers, at least in expectation. ${ }^{17}$ It may be that the farmer is insensitive to

[^7]most demand shocks (as long as there are some thresholds of quantity demanded where they take notice), and it may even be that your action almost never actually causes a price rise. But your action still imposes a severe prospect of harm on the other apple buyers, and still confers a great prospect of benefit on the apple farmer.

## 4 More realistic cases

In the idealised case above, the stakes can be arbitrarily high-the prospects of benefit and harm can be arbitrarily large-at least if the supply and demand curves for apples have just the right properties. But what about more realistic cases? In practice, are there goods we might purchase for which the stakes are high?

Consider a hypothetical good of which the consumers are typically very poor and the producers typically very rich (or vice versa). Transferring a large amount of money from or to the poor will have a far greater effect on how just the distribution of wealth is. So too, it will make a far greater difference to their welfare than would transferring the same amount to or from the rich. So, buying that hypothetical good will involve particularly high stakes (at least if it has suitable supply and demand curves). And this will not be the only difference from Thomson and Dworkin's examples earlier. For one, buying this hypothetical good will not be a zero-sum interaction: transferring money from poor to rich (or vice versa) will result in lesser overall wellbeing (or greater). For another, buying this good would not merely harm those who are freely trying to impose similar harms on you-given the differences in wealth, the poor could not impose harms of remotely similar magnitude. (Nor are the poor freely choosing to impose any harm at all if the good is one that they cannot do without.) Given this, I suggest that if we ever have moral reason to avoid imposing market harms (absent other considerations), we do when those harms are imposed on the poor to the benefit of the rich. Likewise, if we ever have moral reason to provide market benefits, we do when those benefits involve taking money from the rich and giving it to the poor. ${ }^{18}$

Here are several examples of such goods typically produced by the (relatively) rich and consumed by the poor, and so for which it is especially plausible the market harms caused by buying them will be morally relevant. ${ }^{19}$ Here, the wealth of producers and consumers is inferred from their nationalities. ${ }^{20}$ Buy these goods and, in expectation, you transfer wealth from poor to

[^8]rich.

| Good | Majority produced in: | Majority consumed in: |
| :--- | :--- | :--- |
| Lentils | Canada, India | India, Bangladesh, Middle East |
| Rice | China, India, S.E. Asia | Middle East, S.E. Asia, W. Africa, China, USA |
| Soybeans | USA, Brazil, Argentina | China |
| Wheat | China, India, Russia, N. America | Egypt, Indonesia, Algeria, Italy, Brazil |

As well, there are various foodstuffs that are typically produced by the poor and consumed by the rich. Buy these goods and, in expectation, you transfer wealth from rich to poor.

| Good | Majority produced in: | Majority consumed in: |
| :--- | :---: | :---: |
| Avocados | Mexico, Dominican Rep., Peru, Indonesia | USA, W. Europe |
| Bananas | Central America, Philippines | USA, Russia, W. Europe, China |
| Cashew nuts | Vietnam, India, W. Africa | USA, W. Europe |
| Cocoa beans* | W. Africa, Ecuador | W. Europe, USA |
| Coffee ${ }^{*}$ | S. America, Vietnam, Indonesia, Ethiopia | USA, W. Europe, Japan |
| Tea | Kenya, China, Sri Lanka, India, Vietnam | Pakistan, Russia, UK, USA |
| Quinoa | Peru, Bolivia | USA, Canada, Western Europe |

If you were to buy a small amount of one of these goods, just how much money (in expectation) would you transfer from poor to rich, or vice versa? Recall that this amount $A$ is approximated by the following equation, where $S$ is the amount you spend on the good.

$$
A \approx \frac{S}{e_{s}+\left|e_{d}\right|}
$$

Fortunately, we have estimates of $e_{s}$ and $e_{d}$ for at least some of these goods, as listed below (where available). So we can calculate $A$ for at least some of them.

| Good | $e_{s}{ }^{22}$ | $e_{d}$ | A(10) |
| :---: | :---: | :---: | :---: |
| Avocados | - | -0.30 (Nzaku et al., 2010) ${ }^{\text {+ }}$ | - |
| Bananas | 0.2-0.4 (Fally and Sayre, 2018) | -0.54 (Nzaku et al., 2010) | 10.64-13.51 |
| Cashew nuts | - | -1.07 (Grigoryan and Lopez, 2018) | - |
| Cocoa beans | 0.07-0.57 (Tothmihaly, 2017) | -0.06-0.34 (ibid.) | 10.99-76.92 |
| Coffee | 0.02-0.55 (Fally and Sayre, 2018) | -0.07-0.54 (ibid.) | 9.17-111.11 |
| Lentils | 0.17 (ibid.) | -0.87 (Agbola and Damoense, 2005) | 9.62 |
| Tea | - | -0.32-0.64 (CCP, 2012) | - |
| Quinoa | 0.43 (Gamboa et al., 2020) | $\geq-0.29$ (ibid.) 21 | $\geq 13.90$ |
| Rice | 0.01-0.57 (Fally and Sayre, 2018) | 0.01-0.55 (ibid.) | 8.93-1000 |
| Soybeans | 0.06-0.71 (ibid.) | -0.05-0.33 (ibid.) | 9.62-90.91 |
| Wheat | 0.06-0.43 (ibid.) | -0.09-1.6 (ibid.) | 4.92-66.67 |

Take bananas, for example. The equation tells us that, for every $\$ 10$ you spend on bananas, in expectation somewhere between $\$ 10.64$ and $\$ 13.51$ will be transferred from consumers to producersand so from rich to poor. Or take quinoa. For every $\$ 10$ you spend on quinoa, in expectation somewhere above $\$ 13.90$ will be transferred from consumers to producers. Or take wheat. For every $\$ 10$ you spend on wheat, somewhere between $\$ 4.92$ and $\$ 66.67$ in expectation will be transferred from consumers to producers-so from poor to rich. These are considerable amounts of money to transfer for every $\$ 10$ spent. And for the poor, these can represent considerable harms and benefits. ${ }^{22}$

[^9]These figures involve several subtleties that are worth noting. The first is that $A$ is the expected amount of money transferred; the actual amount transferred may often be $o$. If the demand curve is a step function with steps particularly far apart, your purchase will introduce a very small probability of an enormous amount of money being transferred. For instance, it may have a probability of 1 in 1 million of shifting the price of the good but, if it does so, it will shift the price by 1 million times $A$. For now, I will assume that causing someone to lose some amount $A$ in expectation is morally equivalent to causing them to lose $A$ with certainty. This assumption will be relaxed later.

The second such subtlety is that, when we buy bananas or any other of the above goods, very rarely do we buy directly from farmers. If we buy bananas from a western grocery store, a large portion of the money we spend goes to other parties in the supply chain: the store, the store's employees, the distributor, the shipping company, and so on. In the case of bananas, on average only $12 \%$ of that price goes to producers and their workers. So, by spending $\$ 10$ on bananas at the grocery store, we can expect only $12 \%$ of the above amount to go to banana farmers (\$1.28-1.62); the rest goes to those other parties in the supply chain. But, for only $\$ 10$ spent, this is still a considerable amount moved to the farmers. And it will sometimes be much closer to the amounts above if, for instance, one buys the good on a wholesale market or buys a good certified through a scheme like Fairtrade.

A final subtlety worth noting is that you need not buy bananas or other goods that were themselves produced by the poor. Buying such goods produced in a rich country will have a similar effect. Buying a US-grown banana still, in expectation, raises the price of Ecuadorian bananas; regardless of the country of origin, those bananas are sold on the same global market and buyers can easily substitute one for another. So, a price rise in one translates to a price rise in the other. ${ }^{23}$

## 5 The moral significance of market harms and benefits

Buying a good brings a prospect of transferring wealth from consumers of the good to producers. And, for some goods, the amount of wealth transferred in expectation is sometimes considerable. But what is the normative significance of such potential transfers? Do we have moral reasons to cause them, or against causing them? In particular, do we have decisive moral reason for or against causing them, by buying less of some goods and/or buying more of others? Here I present a positive argument that yes, we do. And this does not depend on some controversial moral
by failing to benefit, as they reject any distinction between doing and allowing. But I take it that consequentialists will be untroubled by the verdict that you are required to spend your money in the most beneficial manner possible.)
${ }^{23}$ Substitution effects can also occur between two different goods. For instance, consumers might substitute quinoa for wheat if the price of quinoa rises high enough. This would be cause for concern if it further reduced the amounts of money transferred as a result of you buying one good rather than another. But, fortunately, these substitution effects are already accounted for in the demand curve of each good.
view. ${ }^{24}$
By buying any of the goods from above, you actively impose a considerable risk of harming members of one group, by any plausible account of harm-for instance, by reducing their material wellbeing and/or their overall welfare. And without a principled justification for doing so, we should treat this market harm no differently to harms imposed by other means. (I address several possible such justifications in the next section; note also that the possible justifications identified earlier in Thomson and Dworkin's examples are absent here.) So, we have a pro tanto reason against imposing buying the good. But this need not be a decisive reason against doing so-we might not be morally prohibited from imposing such a harm. This is clearest when buying that good is the only option available; if so, it cannot be prohibited.

That reason can also be outweighed by other, stronger reasons. And, as we saw earlier, buying the good may also confer a great benefit on others. This gives you at least a pro tanto reason in favour of buying the good-one which, if the benefit is great enough, outweighs and so defeats the earlier reason. This is consistent with these reasons being asymmetrical in terms of the magnitude of the benefits and harms-the Harm-Benefit Asymmetry may still hold, such that the fact that an act confers a benefit of magnitude $x$ gives us weaker reason than does the fact that it imposes a harm of magnitude $x$, perhaps for all $x>0$ (see Kagan, 1989, p. 121-5). These facts may well give reasons of different strength, but it seems overwhelmingly plausible that neither entirely disables (or, in the terms of Raz, 1975, excludes) the other.

With that in mind, let's consider two specific cases.

## Wheat Versus Quinoa

You arrive at the grocery store to find that most foods have sold out. All that remains is bread, some made from wheat and some from quinoa. You can either buy $\$ 10$ worth of one or of the other. ${ }^{25}$ (Let's suppose that you cannot bring yourself to go without food, nor can you buy a portion of each.) And, at their current prices, you would benefit equally (or very close to it) from either option.

Here, either option poses a risk of harm to members of some group. But one poses a much

[^10]more severe risk of harm than the other-buying the wheat-based product will (in expectation) take money from the poor, while buying the quinoa will take money from the relatively wealthy. The fact that each action poses a risk of harm gives you a reason against that action, but the reason against buying the wheat will be much stronger. As well, each action poses a prospect of benefit, which gives you a reason in favour of it, and the reason in favour of buying the quinoa will be much stronger. (You may have other reasons in favour too-such as that buying the quinoa will produce a more just distribution of resources or that it will promote overall welfare-which strengthen the case for doing so.) Meanwhile, neither option is (more than slightly) more costly to you than the other, so you will not have any (strong) agent-centred reasons in favour of either option. So, you have decisive moral reason here to buy the quinoa-by doing so you cause less harm, confer greater benefits, and incur no (non-trivial) costs yourself.

Here is a more controversial case:

## Bananas or Nothing

You find yourself in the fruit and vegetable section of the grocery store. You must decide whether to buy $\$ 10$ worth of bananas, for which you have a mild preference. At their current price, buying them would benefit you (very close to) equally as much as not buying them and saving your money for something else.

Here, the option of buying the bananas poses a risk of harm to other banana consumers, and a (much greater) prospect of benefit to the typically poorer banana producers. And by not buying them you would do no harm to, nor benefit, anyone. The fact that buying the bananas will (in expectation) benefit one group gives you reason in favour of buying them, while the fact that it will (in expectation) harm another gives you reason against. But recall the way that these reasons interact-that reason in favour may be outweighed by the reason against, but it cannot be disabled. (More on this in the next section.) And note that the strength of each reason is greater the greater the harm or benefit. This implies that, if the magnitude of the prospective benefit is great enough relative to the harm, it can be decisive. And, here, the magnitude of the prospective benefit is far greater than that of harm-consumers of bananas are typically many times wealthier than producers, and so the impact on their lives from losing $\$ 1$ is far less than the impact of gaining $\$ 1$ on the lives of producers. ${ }^{26}$ So in this situation, most plausibly, your reason in favour of buying the bananas goes undefeated (and all the more plausibly if we admit other reasons in favour too, such as those stemming from concerns of distributive justice). And, as above, you will not have any (strong) agent-centred reasons against doing so. So, you do indeed have decisive reason to

[^11]buy those bananas; you are morally required to.
In practice, when shopping for groceries we often have more than two options-we can buy goods other than wheat and quinoa, and other than bananas or nothing. But the verdicts in these cases still extend more generally. When choosing among a wider selection of goods (among which one is indifferent), an argument analogous to that for buying quinoa in Wheat Versus Quinoa will apply; there will be decisive moral reason to buy the least harmful good among the selection. And when choosing whether to buying anything at all from a selection of goods (among which one is indifferent), an argument analogous to that for buying bananas will apply-if buying one of those goods would be overwhelmingly beneficial, there will be decisive moral reason to buy.

The verdicts in the above cases hold across a range of plausible moral views, but there are nearby cases where some views disagree. For example, consider alternate versions of Wheat Versus Quinoa and Bananas or Nothing in which you aren't indifferent: you may strongly prefer wheat, or to go without bananas. In those cases, some moral views won't require you to buy the dispreferred good - most obviously, those views that recognise agent-centred prerogatives that permit you not to take actions that would be very costly for you. (More on these views below.)

For another controversial but perhaps more realistic case, consider a version of Wheat Versus Quinoa where wheat is much cheaper than quinoa and, if you buy the cheaper wheat, you can donate the money saved to an effective charity. You will then be permitted, or even required, to buy the wheat and donate the savings, at least on some moral views-most clearly, on maximising, aggregative consequentialist views. Doing so would provide greater benefit, involve less risk, and, if you choose the charity carefully, can target those who are absolutely worst-off.

But, even in this case, many plausible views say that you ought to still buy the quinoa. For one, consider any non-consequentialist view that endorses a harm-benefit asymmetry-that says that you shouldn't impose additional harm in order to provide only-slightly-greater additional benefit. But that is what you do by buying wheat in order to donate the savings, so such a view will still favour buying quinoa. For another, consider any maximising consequentialist view whose verdicts are sensitive to the agent's uncertainty about their own future behaviour-that are actualist rather than possibilist in Jackson's (2014) terminology. By such a view, imperfect agents will not be required to donate their every spare dollar to charity. After all, doing so increases the likelihood that they will become demotivated and stop donating in future. Instead, they will be permitted to allocate some of their budget to activities that benefit them and thereby make future donations more likely. Such beneficial activities include buying the more enjoyable quinoa in Wheat Versus Quinoa, or buying the cheaper wheat and spending the leftover funds on other activities. In such a case, the agent can provide greater benefits to others, while preserving their likelihood of future donations, by buying the quinoa. (The same goes for buying the bananas in

Bananas or Nothing.) So, even on (plausible forms of) maximising consequentialism, the verdict will still stand.

But, regardless of what different moral views say in these modified cases, the verdict in Wheat Versus Quinoa (and, to a lesser extent, in Bananas or Nothing) is still clear-cut. If the agent is indifferent (or nearly so) between the two options, and they lack the option to donate the savings (or the two options are priced equally) ${ }^{27}$, then it is overwhelmingly plausible that market harms and benefits are morally relevant. On top of this, it is highly plausible that the agent should choose the quinoa over the wheat and (slightly more controversially) that they should buy the bananas rather than nothing.

## 6 Objections

One might object to the above arguments in various ways, whether to market harms and benefits having moral relevance in general, or whether to the moral relevance of the harms imposed by buying the goods listed above. Below are some of the most important such objections, as well as the reasons I think they fail.

### 6.1 We have prerogatives to impose market harms

One general objection to market harms being morally relevant is this. You might think that moral agents have prerogatives to act in ways that would otherwise be wrong (see Scheffler, 1994; Lazar, 2019). For instance, when an agent has the opportunity to prevent a great catastrophe but only by sacrificing their life, you might think that they are permitted not to do so. Doing so might be supererogatory, but not required. And this may be so even if the agent would be required to prevent the catastrophe if it instead required sacrificing another. Perhaps similar prerogatives arise in Wheat Versus Quinoa and Bananas or Nothing. If so, they may justify buying the wheat and foregoing the bananas.

Such prerogatives are most plausible for actions that are extremely demanding to avoid. And you might think, as Dworkin (2011, p. 287) claims, that it is extremely demanding to avoid imposing market harms. Perhaps this is true of some cases (such as Dworkin's swimming race), so agents in those cases may be permitted to impose market harms. But it is not true of Wheat Versus Quinoa nor Bananas or Nothing. In the cases I have chosen to focus on, there is no such cost-the agent does not (significantly) prefer either option.

But perhaps there is a significant cost: that of the agents doing the work of figuring out what market harms and benefits their actions will cause. Perhaps this task is so difficult that it justifies agents not doing so. I agree that this would perhaps be plausible if every agent needed to themselves figure out the exact harms and benefits of every purchase they make. Likewise, it would perhaps be plausible that agents would be permitted to ignore the harms imposed by eating animal products if it were extremely difficult to determine that those products impose such harms. But agents need not deliberate too hard to know that buying those products imposes great harm-they need only read (the barest sample of) work by philosophers who have done that deliberation for them. Likewise, grocery shoppers need not perform the analysis detailed above, determining the elasticities of each foodstuff and the demographics of producers and consumers... They need only read this paper! I hope that this is not too demanding.

So, if prerogatives justify agents acting against my verdicts in Wheat Versus Quinoa and Bananas or Nothing, those prerogatives are not grounded in costs to the agent. How then would we justify them? One possibility is that we have a general prerogative in market settings to decide what to buy as we wish, or to use our money as we wish. But we would then be permitted to buy products of intensive animal agriculture, of highly polluting industries, or of slave labour, no matter the harm done. This is clearly implausible. Another possibility is that we have a specific prerogative to not forego buying certain goods, such as wheat. But I cannot think of a principled reason why this might be, especially when we have alternatives like quinoa that, in the cases I describe, are preferred equally to wheat. So, it seems implausible that prerogatives excuse us from the verdicts above.

### 6.2 Your victims consent

Here is another general objection. You might think that the producers and consumers upon whom you impose market harms are voluntary participants in the market. They freely choose to produce what goods they produce, to consume what goods they consume, and to buy or sell them at the market price. If you trigger a price rise in some good they want to buy, you change the options available to them, but they still freely choose to buy or sell the good at the new price rather than just go without. So, it seems that they consent to the harm you impose on them-if they didn't, they could simply not buy or sell that good. And when someone consents to be harmed (whether actually or hypothetically), it may be plausible that you no longer have reasons against harming them. So perhaps you act permissibly by buying the wheat.

Note that this objection does not undermine the verdict in Bananas or Nothing. If anything, if we accept it, the case for buying the bananas is even stronger. After all, doing so confers a prospect of benefit to some, it is (nearly) costless for you, and the only reason that might count against it is
that it inflicts a small amount of harm. But, by this objection, those harms give you no reasons against the action. So, it is all the more plausible that you ought to buy the bananas!

But the core claim of this objection does not hold: the poor often do not freely choose what goods to buy. Perhaps the rich do, especially when buying luxury goods. But when the poor buy cheap staple foods, such as wheat or rice, it is implausible that they have a choice otherwise. Those poor consumers are acting under duress-their only alternative is to go without enough food to survive and prosper. Suppose a rich consumer faced a structurally similar situation-such as choosing whether to buy a luxury watch, but with some third party threatening them with death if they do not buy it. In buying the watch, they would not be choosing freely. They certainly are not consenting to buying the watch, not at its current price nor any other. The same goes for the poor buying staple foods at whatever price they must-it is implausible that they fully consent to the terms of the purchase, since they have no genuine alternative. ${ }^{28}$

### 6.3 We are not required to harm in order to benefit

A further objection is this. You may think it implausible that we have moral reasons in favour of conferring benefits when we must do harm in order to do so. You may think that our reasons against doing harm do not merely weigh against, but that they disable, our reasons to confer benefits. In Bananas or Nothing, this would imply that your reasons to benefit banana farmers cannot outweigh your reasons against harming banana consumers, no matter how great those benefits nor how small those harms; and so you cannot have decisive reason in favour of buying the bananas. (Note that, even on this view, the verdict in Wheat Versus Quinoa will still hold.)

If you endorse such a view, you may well reject my verdict in Bananas or Nothing. But such a view is implausible. For one, it has implausible implications, such as when deciding among these three actions.

A: you make Marco moderately worse off; you make Cassie slightly better off.
$B$ : you make Marco moderately worse off; Cassie is unaffected.
$C$ : Marco and Cassie are both unaffected.

Assuming that none of these actions are at all costly for you and that Marco and Cassie are similarly well-off, I take it as uncontroversial that $C$ is morally required. But how should we think about $A$ and $B$ ? Both involve harming Marco, while only $A$ benefits Cassie. On the view in question, your reason against harming Marco disables your reason in favour of benefiting Cassie.

That $A$ benefits Cassie does not count in favour of it at all ; you have no more reason to choose $A$ than choose $B$ here. And that is implausible. Were you to choose $B$ here, you would be making a (slightly) greater mistake than if you chose $A$.

For another problem, such a view does not allow for stakes-sensitivity. Suppose that you have the opportunity to instantly end global poverty, doing the equivalent of giving trillions of dollars to those who need it most; and, to do so, you need only give one rich banker a hangnail. On the view in question, the reason given by that enormous potential benefit is disabled; it cannot count in favour of the action. But your reason against giving the banker a hangnail will still count, so you have decisive reason against doing so. But this is implausible when the stakes are so high. So, we must reject the view in question, and thereby leave the verdicts from the previous section intact.

### 6.4 A free market is the most just system of allocating these goods

Yet another objection is this: you might claim that a free market is the most just way to allocate wheat and similar goods (at least of those ways that are feasible). So, when buying either wheat or quinoa at the market price, you are following the dictates of a maximally just system. And you might think that the moral division of labour is such that, if you abide by the rules of a just system, your moral duties are discharged (Hassoun, 2019). If so, it seems you act rightly even when buying the wheat.

But it is clearly implausible that both: a free market in such goods is just; and the rules of a just system exhaust your moral obligations. Consider the historical examples described earlier: of speculators in Bengal driving up the price of rice and leading to the starvation of millions; and investors in the early 2000s driving up the price of wheat and other staple foods and pushing tens of millions into hunger. For agents to knowingly do so is clearly impermissible. But then, if moral obligations go no further than the rules of a just system, a free market in those such goods cannot be just. ${ }^{29}$ And, if it is just, then one's moral obligations must go further than the rules of that just system.

### 6.5 Manipulating prices in this way is vigilantism

One last objection to agents considering market harms or benefits is adapted from Hussain (2012).
When individual consumers attempt to avert market harms or confer market benefits, they are making strategic use of a social institution-the market-to incentivise others to spend more or less on particular goods and thereby change the fortunes of the poor. ${ }^{\circ 0}$ But you might think that this is an illegitimate use of the market as an institution. Even if it would be better for wealth to be redistributed to the poor, you might think that such redistribution should only be pursued through particular social institutions, such as legislatures. To do so instead through strategic use of the market-an undemocratic institution in which individuals are expected to pursue only their own interests-could be thought of as a form of vigilantism, and as inconsistent with procedural values.

This worry has been discussed in depth elsewhere (see, e.g., Barry \& Macdonald, 2019; Fink \& Schubert, 2019). But I will provide a gloss of several reasons we should be sceptical of it. The first is that, if the procedural values of institutions give individuals moral reasons at all, those reasons can most plausibly be outweighed. Like our reasons to minimise harm, it seems they can fail to be decisive when the potential benefits are great enough in comparison. And, when buying any given quantity of quinoa or bananas, the expected benefits conferred on the poor (and the expected harms averted) seem far more morally grave than one's reasons not to misuse the market in that way. ${ }^{31}$

The second reason is that, to find the objection compelling, one must accept that a consumer's motive can determine their actions' permissibility (ibid.: 4-5). If a consumer buys quinoa rather than wheat because they prefer the taste of the former, they act permissibly; but, if they do so out of concern for the poor, they act impermissibly. But this cannot be, at least on any moral view that denies that the agent's motives directly inform the permissibility of their actions. Even on views that accept that the agent's motives can be morally relevant, it is counterintuitive that it is the agent motivated by concern for the badly-off who acts impermissibly and not the agent motivated by self-interest.

The third reason to find the objection dubious is that it proves too much. If you donate to (or volunteer for) a charity that combats poverty, especially if you do so to support the charity's efforts in fundraising from others, the objection seems to apply to your behaviour too (Barry \& Macdonald, 2019: 315). You are circumventing the proper institutions to achieve your goal and, if donating to support fundraising efforts, you are influencing others' spending to achieve it. But it seems implausible that such behaviour is uniformly impermissible, especially when it confers great benefits.

[^12]A final reason to reject the objection is that, even if one seeks to protect procedural values, transferring wealth to the poor through market transactions seems to improve that protection. Whether at a domestic or international level, the poor typically have more limited access to court systems and more limited influence on democratic decision-making than do the rich. (The latter is even more severe on the international level, where many of the global poor live in countries with both weak domestic institutions and lesser influence on the creation of international law.) Redistributing wealth to the poor plausibly brings their influence more in line with what the procedural values of democratic institutions require, more so than the degree to which those procedural values are violated by a consumer unilaterally causing the redistribution. (See ibid. for further discussion.)

### 6.6 The expected harm may be lower than the average harm

Further objections apply specifically to my verdicts in Wheat Versus Quinoa and Bananas or Nothing in particular. The first is an empirical one, adapted from Budolfson (2019).

In the market for any good, there will be many buffers: phenomena that make prices and quantities sold less sensitive to small purchases. For example: grocery stores typically order more bananas than they sell and dispose of the leftovers; grocery chains often order more than they distribute to stores; and even farmers grow more than they sell. These buffers make it less likely that buying a single banana will change the store's next banana order, the chain's next order from wholesalers, and the farmers' growing plans. The more such buffers exist, the less likely that buying the banana will change the number that farmers sell, and even less likely that it will change the number they grow. As the number of stages and different actors in the supply chain grow large (as in practice), the probability of your purchase making any difference becomes tiny. For this reason, you might think that the probability of your purchase increasing banana sales for producers by any given $n$ is even less than $1 / n$; and so you might think that the expected amount of money you transfer to producers will be far less than the average amount $A$ calculated earlier. If so, the prospects of benefits and harms will be milder than I suggested above. ${ }^{32}$

But this drop in probability need not result in a drop in the expected harms and benefits caused by your purchase. There is reason to think that, in the event that your purchase changes the producers' sales figures, the harms and benefits will be proportionally greater; such that the expected harms and benefits are just as great as if there were no buffers.

To see why this is, suppose that bananas currently cost $\$ 1$ per kilogram on the wholesale

[^13]market, that they would rise to $\$ 1.05$ if 120 million tonnes were sold this year, that they would drop to $\$ 0.95$ if only 110 million tonnes are sold, and that, between those amounts, you have no idea where the prices will change and by how much..$^{33^{34}}$ But between those amounts sold, in line with this objection, no purchase of a single banana makes as much difference to the price as calculated above. Is it possible that prices behave in such a way? No, it isn't. For every quantity of bananas demanded (down to a single banana), there is some fact of the matter of what the price would be-prices are given by some exact number, with no vagueness. So, there is a fact of the matter what the supply function is and what price it gives everywhere in the interval of 110 million to 120 million tonnes demanded at $\$ 1 / \mathrm{kg}$. And we can get from 110 million tonnes to 120 million tonnes by a finite number of additions of one banana at a time. So, the price rises at each of those exact numbers of bananas must be great enough sum to $\$ 0.10$, the difference between $\$ 0.95$ to $\$ 1.05$. They cannot sum to any less, no matter how far apart those price rises are due to buffers in the system.

What is the (unconditional) probability that you buying 1 kg of bananas will make the difference in tipping the quantity sold over such a threshold for a price rise? If there were only one such threshold, at precisely 120 million tonnes, then the probability is 1 in 120 billion. (After all, without further information, your probability distribution over the number of bananas otherwise sold should be uniform across the interval of 110 million tonnes to 120 million tonnes.) But the price rise would be 120 billion times as great as the average price rise per kilogram, so the expected price rise would match the average price rise. And if there were many such thresholds, the probability of triggering a price rise would be much higher, but the rise would be proportionally smaller. Again, the expected price rise must match the average price rise. So, the expected amount transferred from consumers to producers will indeed be $A$, from above. So, this objection fails; for sufficiently uncertain agents, it is impossible that the expected harms and benefits are vastly less than I've claimed. ${ }^{35}$

### 6.7 Large expected harms may not be so bad

A further objection targets the normative side of my argument from earlier. In that argument, I assumed the expectational view : that the larger the expected amount of harm you do via an action, the stronger your moral reasons against performing that action (and, likewise, the larger the expected amount of benefit, the stronger your reasons in favour). But you might think that the expectation

[^14]of the amount of harm or benefit is not the correct measure. If so, perhaps the harms and benefits described above are far less morally important than their expectations suggest.

At least prima facie, it does seem plausible that our moral reasons in favour of benefiting and against harming do not perfectly correspond to the expected amount of harm or benefit. Unlike some alternative measures ${ }^{36}$, the expectation of harm or benefit plausibly fails to capture the importance of avoiding particularly bad outcomes, or the unimportance of further improving quite good outcomes. For instance, the expectational approach implies that providing a benefit of value 1 for sure is no better than providing a probability of 1 in 1,000 of a benefit of value 1,000 . But you might think that the guarantee of that modest benefit of value 1 is far better than the tiny probability of the much greater benefit.

Fortunately, deviating from the expectational approach does not seem to undermine my verdict in Wheat Versus Quinoa. The most plausible alternatives to that approach assign greater importance to reducing the probabilities of the worst outcomes and less importance to increasing the probabilities of especially good outcomes-put differently, they entail risk aversion rather than risk seeking. ${ }^{37}$ Due to this, those alternatives treat small probabilities of great harm as even worse than the expectational approach does. But the verdict I proposed for Wheat Versus Quinoa was decided by small probabilities of great harm. If we adopt a risk-averse measure of the severity of a prospect of harm, then the reasons against buying each option are all the stronger, especially those against buying wheat and risking far greater harms.

The situation is more complicated in Bananas or Nothing. Buying the bananas delivers a small probability of both enormous benefit and mild harm, while buying nothing delivers a certainty of neither. Depending on exactly what sort of risks we are averse to, the evaluation can vary. If we are only averse to risks of doing more harm than benefit overall, then we have no further reason to avoid buying the bananas. Doing so is risk-free-the act is sure not to produce great harm without also producing far greater benefit. But if instead we are averse to the risk of doing any harm at all, and/or averse to the risk of failing to confer any benefit, then we may be required to buy nothingeven though they occur in the same states of the world, the risks of harm may still outweigh the prospects of great benefit. But recall that potential benefits are far greater than the potential harms-the rich consumers you harm would be harmed very little, while the poor producers you benefit would be benefited greatly. So, I suggest that it would take an extreme level of risk aversion to reach this verdict. Within plausible levels of risk aversion at least, my verdict would still stand.

[^15]But, admittedly, there is greater philosophical wiggle room in Bananas or Nothing than there is in Wheat Versus Quinoa.

### 6.8 Imposing many small harms isn't so bad

You might think the importance of the market harms and benefits I have described is overstated for another reason: they typically take the form of small monetary harms and benefits imposed on each of a large number of people. You might think that some small harm (or benefit) imposed on each of 1,000 people is less important morally than a harm (benefit) 1,000 times greater imposed on a single victim-that small harms (benefits) imposed on many are less important than harms (benefits) of similar total magnitude concentrated on just a few people. ${ }^{8}$ If you buy a small amount of wheat (or a similar good) and you do in fact raise the price by a small amount, you transfer a large amount of money from poor to rich. But the additional monetary cost imposed on each of the poor is dispersed widely and, per person, is tiny - perhaps a few cents per meal. You might well think that, dispersed in this way, the moral importance of these costs combined is far less than is suggested by simply adding them up. If so, your moral reasons against causing such harms (and in favour of causing similar benefits) are far weaker than I have suggested.

There are two reasons this objection does not ring true. The first is that individuals obtain diminishing marginal benefits from money-receiving an extra $\$ 1$ million is less than 1 million times as good as receiving an extra $\$ 1$. So, dispersing these monetary benefits widely leads to greater total improvements in wellbeing and hence, you might think, to stronger moral reasons in favour of providing such benefits.

The second reason is that small increases (or decreases) in many people's wealth do not constitute many small benefits (harms). Especially among the global poor, additional income is sometimes spent on goods that radically improve someone's life. Occasionally, giving an extra few cents to someone in extreme poverty will allow them to eat a meal that they would otherwise forego, or to buy a life-saving medicine for a family member when they would otherwise have been a few cents short. In general, the benefit provided to each recipient by giving them a small amount of money will vary enormously-for many it will make no difference while, for others, it will radically improve their situation. Likewise, the harm imposed on each recipient by taking away a small amount of money will vary-for some it will make no difference, while for others it will radically worsen their situation. So, although the amounts of money per person are small, we should not think of these transfers of wealth as simply many small harms or benefits. The morally relevant effects of such transfers will include a relatively small number of enormous harms and
${ }^{38}$ Temkin (2012: pp. 67-8), for instance, endorses this claim with respect to both harms and benefits.
enormous benefits. (The same perhaps cannot be said of the harms done to rich consumers by buying quinoa and similar goods-depriving a wealthy person of a few cents is far less likely to do them severe harm.)

## 7 Conclusion

On the face of it, the act of buying one good or another at the grocery store may seem innocuous. By making that purchase, you slightly benefit yourself and the store owner; perhaps you even harm a later shopper ever so slightly by depriving them of the good. But these effects seem minor and, if some philosophers are to be believed, are of little moral concern.

I have argued that we ought not ignore such harms and benefits, not in general nor in the specific cases I consider. In practice, for various goods that many of us buy, each purchase imposes harms and benefits on others (at least in expectation). For instance, spend just $\$ 10$ on wheat and you take somewhere between $\$ 5$ and $\$ 67$ from the poor and give it to the rich. Spend $\$ 10$ on bananas and you do the reverse; you take somewhere between $\$ 11$ and $\$ 14$ from the rich and give it to the poor. And the harms and benefits that result are morally significant-they give us strong moral reasons against buying some goods and in favour of buying others. In some circumstances, those reasons are decisive-due to the harms and benefits that would result, we are morally required to buy some goods and not others.

In short, not only do market harms and benefits matter morally; considering them is often crucial for making consumption choices that are morally permissible. In light of that consideration, when we face situations analogous to Wheat Versus Quinoa or Bananas or Nothing, we are required to buy certain goods. And I suspect that many of us face such situations on a regular basis. So many of us ought to quite drastically change our consumption habits. ${ }^{39}$

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[^1]:    ${ }^{2}$ Prices here and throughout are the prices obtained by producers in the country of production, measured in 2021 US dollars.

[^2]:    ${ }_{3}$ Related questions include: Is a system that allows free trade of certain goods, and so allows that such harms and benefits arise, truly just? What additional obligations arise for large firms from these harms and benefits? And, given these harms and benefits, how should governments set tariffs and subsidies? I won't attempt to answer any of those questions here, opting instead to focus on cases of individual consumers making purchasing decisions. But I suspect that the considerations I raise will have implications for those questions, which I hope to see explored elsewhere.
    4 Exceptions appear in a response to Dworkin by Clayton and Stemplowska (2015), a brief discussion of pecuniary externalities in Hausman (1992, pp. 104-5), and in a discussion of 'passive gains' in the context of climate change by Mintz-Woo and Leroux (2021, pp. 10-1). Note that the recent discussions of collective harms by Kagan (2011), Budolfson (2019), and Hedden (2020) are not such exceptions-despite the resemblance, these discussions have been concerned with real externalities rather than pecuniary ones.
    ${ }_{5}$ Philosophers are not alone in this-economists, too, routinely ignore pecuniary externalities when analysing the effects of policies, even when warning against non-pecuniary externalities. The main reason for this is likely that, unlike non-pecuniary externalities, pecuniary externalities do not produce Pareto inefficiencies: outcomes that are strictly worse for some and better for no one than some available alternative. In the case of an agent taking an emission-intensive joyride, those who are later harmed by the agent's emissions would gladly pay them not to take the joyride; by doing so, those affected would be strictly better off and the joyrider, if sufficiently compensated, would be no worse off. But the same Pareto-improvement cannot be performed for a pecuniary externality; the situation is already Pareto-efficient (see Pigou, 1924, pp. 165-6). So, to economists who decline to make interpersonal utility comparisons, and who assume away any non-consequentialist notion of harm or benefit, preventing a pecuniary externality cannot constitute an improvement.

[^3]:    ${ }^{6}$ This feature is noted by Clayton and Stemplowska (2015). They too argue that, without it, imposing a severe market harm may be

[^4]:    ${ }^{7}$ Note that, throughout, I am talking about the moral reasons and obligations had by individuals rather than those had by collective or group agents. I will also largely overlook the moral reasons an individual possesses by virtue of their membership in a collective or group agent (with the exception of the discussion in §6.5). This omission is partly for the sake of brevity and partly because it is harder to make the case for market harms and benefits being morally relevant if we deny collective duties-if we admit such duties then my arguments can be made just as easily in terms of collective agents, but many of the objections discussed below are avoided much more easily.

[^5]:    ${ }^{8}$ This model involves various assumptions, including: that the supply function is increasing for increasing quantity; that the demand function is decreasing; that both functions are defined for all possible quantities, even quantities that are not whole numbers of apples; that both functions are smooth; and that the market being modelled exhibits perfect competition, in the standard economic sense. The first three of those assumptions are each either innocuous or true. The fourth is relaxed below. And the fifth is not fully accurate, but it approximates reality and relaxing it does not significantly weaken the case for the phenomenon I describe below. (One way we might relax it is to allow some market participants to have market power, and model this as monopolistic competition; but this turns out to strengthen the case for this phenomenon occurring.)
    ${ }^{9}$ The exact time period covered by the model will affect both the supply and demand curves and the price. If the time period starts when (or shortly after) you buy the apple, the seller already has the information about the increased demand and so knows to raise the price. And we can assume that the period ends whenever the seller would next revise the price based on the information they have.
    Alternatively, we could model a time period starting long before your apple purchase and/or ending long after the seller's next potential price change. If so, the seller is unlikely to charge the equilibrium price for the entire period-by the time you buy your apple and thereby inform the seller of the increased demand, many other buyers will already have obtained apples for $\$ 1$ each. But the average price the seller charges over any long time period will still approximate the period's equilibrium price. And the equilibrium price is still affected by changes in demand, and so by your choice to buy the apple. And this price change will be determined by the model above, just with different supply and demand curves, corresponding to the different time period.
    ${ }^{10}$ For these to be exactly equivalent requires that the supply curve matches the marginal cost of production and so, among other things, that there are no fixed costs involved in production. But in realistic situations where quantities are large, the producers' profit will be closely approximated by that area above the curve.

[^6]:    ${ }^{11}$ Economists often implicitly add to the standard model an assumption that individual consumers are pricetakers rather than pricemakersthat individuals' small-scale purchasing decisions make no difference to the demand curve and price. But this assumption is motivated not by accuracy but by practicality, especially when studying large-scale trends rather the effects of each individual purchase.
    ${ }^{12}$ This will be the additional revenue of slightly fewer than one apple, at least within the economists' model. (Equivalently, the shift in quantity $\Delta Q$ will be less than one.) This is because it is assumed that the demand curve is smooth, and so any change in price will lead to a drop in the quantity demanded. So, if you trigger a price rise, you will lead some other customers from foregoing their apple purchases. But this will reduce the quantity purchased by others by at most one apple, and typically much less than one (unless apples are a perfectly elastic good).
    ${ }^{13}$ This is true here only because of the specific supply and demand functions. But the same will be true in the following section for the full range of goods I consider.

[^7]:    ${ }^{15}$ This situation is discussed by Kagan (2011), Budolfson (2019), and Hedden (2020). Kagan and Hedden's arguments apply just as well to this situation, implying that the expected effect of raising the price by $\$ x$ on production will be equal to the average effect of raising the price per $\$ x$ of raising the price by large amounts.
    ${ }^{16}$ These probabilities may be interpreted as either evidential probabilities or subjective credences, whichever you think is the one relevant to moral decision-making. What follows can be read in terms of either.
    ${ }^{17}$ There is some reason to think that the supply and demand curves will be very nearly smooth, and so the actual transfer will often be large too. In a market of many producers and consumers, each producer (consumer) will have a different function representing their individual quantity supplied (demanded) at each price, with the steps located in different positions based on their own circumstances. The marketwide supply and demand curves are a combination of all of these individual functions. And since those individual functions have steps at different positions, the marketwide supply and demand curves will have more and more frequent steps-both curves will be very close to smooth.

[^8]:    ${ }_{18}$ Neither group needs to be exclusively rich or exclusively poor, nor does every member of one group need to be richer than every member of the other. It suffices for one group to be predominantly poorer than the other for the argument below to go through.
    ${ }^{19}$ You may notice that the goods below are all foodstuffs. These make up a large portion of the weekly budget of the extreme poor. In addition, agricultural goods tend to be less dispersed around the world than those of manufactured goods. (For the same reason, I focus on foodstuffs in the next list as well.)
    ${ }^{20}$ Admittedly, nationality is not a perfect guide for inferring wealth. It could be that, say, wheat and soybeans are grown by the very poorest people in the USA. But such a scenario is unlikely for any of these goods-most of the crops listed here are typically grown on large farms. Likewise, the crops listed below that are grown in poorer countries are typically grown on very small farms (see Ricciardi

[^9]:    ${ }_{21}$ The above estimates of $e_{S}$ describe the long-run elasticity of supply. On short timescales, all such goods will be far less elastic, since it will take years for farmers to increase their production in response to a demand shock. Given this, the figures for $A$ below will be underestimates-in reality, the harms and benefits of buying such goods will often be far greater.
    ${ }^{22}$ This raises the following possible worry. Given that you can transfer more money in expectation to the poor by buying bananas than by donating directly to the poor, it may seem that by donating money directly you do harm, and so doing so might be impermissible. After all, the poor would (collectively) be better off if you spent the money on bananas. But this worry is avoided if we accept a moral distinction between doing and allowing. By donating money rather than spending it on bananas, you are not doing harm to the other potential beneficiaries; you are merely allowing them to go unbenefited. Likewise, when using your money for anything other than charity or buying goods similar to bananas, it seems inappropriate to think that you are doing harm. (Consequentialists may think that you are acting wrongly

[^10]:    ${ }^{24}$ In particular, my argument does not require that a maximising, aggregative consequentialist theory is true; nor does it require that individuals have moral reasons to help fulfil collective duties; nor does it require a commitment to distributive justice. (By such views, the case for buying some goods rather than others would be far more clear cut.)
    ${ }^{25}$ You might worry that the stipulation of spending $\$ 10$ on one or the other may make this case morally distinct from many more practical cases. After all, most of us rarely spend $\$ 10$ on bread or bananas at a time. And you might think that, if you spend a mere $\$ 0.50$ on such a good, the prospects of harm and benefit are negligible and so may be ignored. But this would be a mistake. Suppose you spend $\$ 0.50$ on wheat bread, walk out of the store, walk back in, spend another $\$ 0.50$, and so on until you have spent any given number of dollars. If each individual purchase is permissible, then there is a strange inconsistency. After all, the sequence of many purchases can impose a severe prospect of harm (with no matching benefit), and so is impermissible. To avoid this inconsistency, we should judge an agent (with other, equally preferable options) spending $\$ 0.50$ on a good twenty times as permissible (and so each of those $\$ 0.50$ purchases as permissible) if and only if spending $\$ 10$ on the good is permissible. Alternatively, even if you think this inconsistency unproblematic, even a consumer who spends $\$ 0.50$ once per week on wheat bread will, over their lifetime, spend a large enough amount to impose a severe prospect to harm and so too act impermissibly.

[^11]:    ${ }^{26}$ In terms of self-reported life satisfaction, our best evidence to date suggests that the value of marginal in- creases/decreases in wealth is hyperbolic; if someone is ten times wealthier, $\$ 1$ will be worth only one tenth as much to them (Stevenson and Wolfers, 2008). For reference, the average salary in the United States is more than ten times higher than that of Ecuadorian banana farmers, and so the marginal value of $\$ 1$ will be ten times higher for those banana farmers.

[^12]:    ${ }^{30}$ Hussain himself argues against only market behaviour aimed at achieving social change-that "...will create an economic incentive for other agents to act in ways that will advance some moral, social, environmental, or other nonmarket agenda." (ibid.: 112). It is unclear whether, for Hussain, buying or foregoing goods to influence prices and avert/confer market harms/benefits would qualify. Still, much the same argument might be made.
    ${ }^{31}$ Even when the quantity purchased is small, one's reasons to benefit seem to outweigh one's reasons not to misuse the market. After all, the latter reasons should scale down the more minor one's misuse.

[^13]:    ${ }^{32}$ In his original argument, Budolfson also claims that in practice we have a great deal of information about such buffers and current trade figures available to us. So, often, we might be even more confident that the market is not within one additional sale of a rise in price or quantity produced. In the setting I am considering, I find this claim implausible, for reasons similar to those given by Hedden (2020, p. 538-9): given the complexity of such industries and the opacity of supermarket chains, none but the most diligent industry experts have much idea where these thresholds are nor precisely how great consumer demand is.

[^14]:    ${ }^{33}$ This resembles the sort of information we get from economists' estimates of elasticity such as those above. Those estimates are typically drawn from historical data, where we only have a few discrete data points-we may see in recent history that such and such amount of the good being demanded at such and such price leads to a higher (or lower price). But we can only speculate about exactly what will happen in between those data points.
    ${ }^{34}$ These figures are not far from reality-see Food and Agriculture Organization (2020b).
    ${ }^{35}$ cf Norcross (2004: p. 232-3). For another compelling response, see Hedden (2020, p. 535).

[^15]:    ${ }^{36}$ Such alternatives include: an expected utility approach where utility is a concave function of the size of the harm or benefit (see Arrow, 1971); Buchak's (2013) risk-weighted expected utility theory; and Williamson and Bottomley's (n.d.) weighted linear utility theory. And each of these can be applied at the level of evaluating the prospect of harm or benefit to each individual, or at the level of evaluating the prospect of total harm and/or benefit.
    ${ }^{37}$ Buchak's (2013) preferred measure-risk-weighted expected utility-allows for both risk aversion and risk seeking, depending on the risk attitude of the agent making the decision. But, while risk-averse preferences may be plausible in the moral setting (as Buchak argues), I know of no philosopher who defends risk-seeking preferences in this setting.

