Divestment Campaigns

AUTHOR: MAX CARPENDALE
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INTERVENTION REPORT

Investigating whether a divestment campaign could be a recommended intervention for improving the lives of factory farmed animals.
OVERVIEW

This is a summary research report by Animal Ask, investigating whether a divestment campaign could be a recommended intervention for improving the lives of factory farmed animals.

We would like to thank the experts we looked to for guidance in this report.

Animal Ask has been founded with the express aim to optimise and prioritise future asks to assist animal advocacy organisations in their efforts to reduce farmed animal suffering. We provide organisations with in-depth research narrowly targeted at key decisions between different animal asks, supporting organisations, individual activists, policymakers and donors so that they may do more good in the long-term.
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The idea of divestment has been growing in popularity in recent years. A divestment campaign aims to persuade aligned institutional or individual investors to eliminate investment in any companies involved in specific controversial activities. Divestment is a kind of social impact investing or socially responsible investing, where the aim is to achieve social goods as well as economic returns from investing.

In the context of animal advocacy, this may be a campaign for full divestment from animal agriculture or divestment from companies in the sector with low Environmental, Social, Governmental (ESG) scores, which are used to encourage better practices in the industry (Scott 2021). Divestment can target institutional or individual investors purchasing a company's stocks, venture capital or angel investors, or banks or other financial institutions that provide loans to these companies.

Divestment works by stigmatising the targeted industry, leading investors to believe that not only is divestment from the specific industry morally required, it also makes financial sense.

This report analyses this topic from the perspective of an organisation looking to start a new campaign. It tries to answer the question of if a new divestment campaign would be optimal or if another campaign would be preferable.

The total market value of shares in animal agriculture is over $3 trillion globally (Dent 2021; Staista n.d.; The Business Research Company n.d.). Despite the substantial size of the industry, there are a host of moral issues within it, all of which could be the basis for a divestment campaign. These issues include poor animal welfare, reduced human health, human rights violations, and harmful environmental impact. These issues may threaten the future financial performance of the industry.
THEORY OF CHANGE

Key:
- Dark green boxes indicate options that we believe have a strong positive impact on welfare
- Light green boxes indicate options that we believe have a moderate positive impact on welfare
- Orange boxes indicate options that we believe have a moderate negative impact on welfare
- Dark red boxes indicate options that we believe have a strong negative impact on welfare

Thickness of the arrow represents the strength of evidence of the causal relationship.
EXECUTIVE SUMMARY

We can examine the direct impact of divestment campaigns through either a theoretical or an empirical analysis. Starting with a theoretical approach, economic theory suggests that divestment may not have strong direct impacts on the cost of capital. This is because in an efficient market if an individual does not buy a stock, the stock will become undervalued, incentivising someone else to buy it instead.

The results of empirical research align with the predictions of this theoretical model, with research typically finding short-term, but not long-term, effects. In less efficient markets, such as the market for angel investing, there are likely to be stronger direct effects.

There are also alternative theories that suggest that markets are less efficient than this. If true, these theories would suggest divestment will have stronger direct effects. However, the argument for these theories is not as strong, and even these theories may not predict long-term changes in value from divestment.

Many divestment activists acknowledge the theoretical and empirical evidence against divestment campaigns having an effect on the cost of capital. Instead, they view the indirect effects of divestment as the primary benefit of these campaigns (Hestres and Hopke 2020). The two main indirect effects that academics and activists have focused their evaluation on are stigmatisation of the target industry and movement building.

Stigmatisation of the target industry delegitimises the industry in the eyes of the public. Other people or organisations who associate themselves with the industry risk becoming stigmatised themselves and therefore may break off association, negatively affecting the target industry. For example, many organisations severed ties with South Africa during apartheid, perhaps as a result of the divestment campaign against it.

Another important indirect effect is that divestment campaigns appear to be very popular and have good movement building potential. This is especially true given the soaring popularity of the fossil fuel divestment movement. A campaign to divest from animal agriculture could
potentially ride on its coattails, helping make this probably one of the strongest arguments for a divestment campaign.

However, these historical cases do not allow us to easily isolate the causal effect that the campaigns are having. This is important because without being able to isolate the effect, we cannot cleanly compare a divestment campaign to the effect that another type of campaign would have had or what would have happened if there had been no campaign at all. This limits our ability to be confident that any campaign truly had an impact.

If our main focus is these indirect effects, as existing evidence suggests it should be, there are two additional reasons to believe that divestment could be a suboptimal campaign for animal advocacy organisations:

1) Animal advocacy organisations already have tried and tested methods for stigmatising animal agriculture, including vegan (or reducetarian) outreach, corporate campaigns, and policy change campaigns. These campaigns may lead to the same indirect effects that provide the strongest support for a divestment campaign. Moreover, there is also a better case for significant direct effects from these campaigns.

2) The arguments that would be most persuasive in encouraging people to divest from animal agriculture highlight its environmental impact. This is also currently the most widely-used argument encouraging people to divest from animal agriculture. However, this framing could pose an animal welfare problem. The farming of large animals, especially cows, has a much larger environmental impact than the farming of smaller animals. Therefore, a divestment campaign that was not careful to avoid this might well disproportionately affect the farming of large animals. This in turn risks shifting consumption to smaller animals, increasing the total number of animals farmed for food, since many more small animals must be raised to produce the same amount of meat as a large animal.

In summary, though this is a complex topic with many uncertainties, we think the existing evidence in favour of the theory of change for divestment campaigns is too weak to invest significantly in such campaigns. Although given the uncertainty surrounding the relative efficacy of the
movement-building and stigmatisation effects of different campaigns, additional empirical research could update us positively towards this campaign. Any divestment campaign that is carried out should be particularly mindful of the small-animal replacement problem (point 2 above) to minimise the chance of the campaign being directly harmful.
EVIDENCE FOR THE THEORY OF CHANGE

Economic theory

In order to explain the theory for the possible effects of divestment, we must first explain some economic concepts.

Publicly traded companies are companies that are listed on the open market. When companies become publicly traded, they raise money by selling shares of the company in an initial public offering (equity financing through selling stocks) or through borrowing money (debt financing). Afterwards, the stocks are traded between investors on a secondary market. Many markets are electronically linked together into a total market that is very large. Anyone with the funds is, in principle, able to access the market and buy from it (Hayes 2021b).

Stock prices are determined by supply and demand. The lower the demand for the stock is, the lower the price for that stock. Conversely, the higher the supply of that stock, the lower the price for that stock (Fernando 2021).

To say that a market is efficient is to say that the prices already incorporate available information. Under this model, if a person has information that a certain stock is undervalued, they can take advantage of that information by buying the stock until that stock is no longer undervalued (Downey 2021; Tarver 2021). The market is then said to have incorporated the available information. Since publicly traded stocks are in principle accessible to everyone, they can be viewed as incorporating all existing information.

Under these assumptions, theory suggests that the direct effects of divestment should be minimal. This is because in an efficient market, if people divest from a particular stock, demand will decrease and therefore the price of that stock will become lower. Morally neutral investors will then buy it instead in order to make a profit on the undervalued stock. If the market is efficient in this way, opportunities like this will be seized by morally neutral investors, and any damage to company equity will be limited to the very short-term.

Of course, this theoretical model may be unrealistic in practice. If the market for all opportunities were efficient in this way, it would not be possible to outperform the market since all opportunities would have already been
taken. However, despite a great deal of noise in the sample because of the highly variable performance of stocks, the strong track records of some investors suggests that they have outperformed the market (Downey 2021). Nevertheless, publicly traded stocks come closest to meeting this ideal of an efficient market. What is most likely is that stock markets are mostly efficient, but not completely so, leaving some room for divestment to have a small direct effect.

Furthermore, given stocks are traded in secondary markets, the primary effect of divestment would be on the finances of shareholders rather than the company itself. However, if a company decides to sell more stock then a lower price will be quite problematic for them. So even if divestment was successful in reducing the stock price of the targeted industry, the effect on company cash flow might not be large (Hillebrandt 2018; Brest and Born 2013). An analysis of the credit of large oil companies found that they were not forced to pay a premium compared to other companies in order to raise funds, and their activities and operations were essentially unchanged (Gan 2019).

In cases where the market is much less efficient, this argument does not apply. In these cases, divestment will have much stronger direct effects (Ansar, Caldecott, and Tilbury 2013). The principal example of this is debt financing. Debt financing is particularly important because it provides more cashflow to most companies than equity (Gan 2019). For the oil and gas sector, it is estimated that debt financing provides 9.5 times as much financing as equities (CNN BUSINESS n.d.). The market for debt financing centres on a small number of large banks (amounting to 40% of the market) and is generally less liquid (less trading is done) than equity financing (Ansar, Caldecott, and Tilbury 2013; Quigley, Bugden, and Odgers 2020). This should make the market for debt financing at least somewhat less efficient than the market for equity financing.

This is supported by more empirical evidence of a stronger direct effect of divestment on access to debt financing. Cojoainu et al. (Cojoianu et al. 2019) studied the effects of divestment announcements on debt financing for fossil fuel companies. They found that for every 1% of assets under management divested from fossil fuels,
there was an associated 0.11% decrease in debt financing for fossil fuel companies in that country.

The other two examples of these are angel investing and investing in emerging markets. Emerging markets are less efficient because there are fewer other investors in the space and because the markets are often more difficult to access (Cajueiro and Tabak 2004). The other principle example is angel investing, where substantial seed funding is given to a startup organisation before that organisation is publicly traded (Ganti 2021). In this case, the investment provided is far less replaceable as a failure to acquire initial investment can greatly diminish the growth of the company or force it to shut down entirely.

**Empirical evidence for increases in the cost of capital**

Empirical evidence generally does not support strong direct effects from divestment (Gan 2019; Bergman 2018). There is clear evidence for short-term effects on share price from divestment, but little evidence of any longer-term effects (Dordi and Weber 2019; Ansar, Caldecott, and Tilbury 2013; Titian 2015). For instance, Hillebrandt and Halstead (Hillebrandt 2018) write that:

“There is clear evidence of short-term market inefficiency such that impact investors can affect stock prices on the timescale of around 3 months. There is expert disagreement about whether socially responsible investing is likely to have an effect after 6 months and beyond: some economists hold that the effect will be completely offset, some that more than half will be offset, and some that a substantial fraction of the effect might persist beyond 6 months.”

Effects that are limited to the short-term are what we might expect as the market reacts to undervalued equity. Here are some additional relevant studies and reviews supporting this claim:

Dordi and Weber (Dordi and Weber 2019) specifically analyse the case of divestment. They analyse the effect of 24 announcements of divestment on the share prices of 200 fossil fuel companies. They found that the announcements of divestment did affect the share price of the fossil fuel companies, but they were unable to make a judgement of effects beyond 10
days due to confounding effects.

Titan (Ţitan 2015) discusses evidence of some market inefficiency in the short-term. This is based on studies finding that investors were able to continue to get abnormal returns within a period following the announcement of information that indicated there should be abnormal returns on this investment.

Patel and Welsh (Patel and Welch 2017) found that the price increase companies experience from being added to the S&P 500 disappears almost completely after six months. This price increase happens arbitrarily since when companies are added, investments that track the S&P 500 automatically invest in them. This case shows an initial market inefficiency being corrected over the course of six months.

As such, this evidence favours market efficiency in the long run (but not necessarily the short run) for publicly traded stocks (Ansar, Caldecott, and Tilbury 2013). These short-term fluctuations in stock prices are unlikely to be as consequential to companies as long-term, compounding devaluation of stock prices. Divestment would therefore have minimal direct impact under this interpretation.

However, there is some evidence that public markets are not completely efficient. Pastor et al. (Pastor, Stambaugh, and Taylor 2020) find that dominant preferences have some effect on the price of stocks, with “green” stocks having higher than expected prices. This may be because investors are willing to pay more for the stocks because of a moral preference, lowering the cost of capital for these companies. Circiretti et al. (Ciciretti, Dalò, and Dam 2019) find that stocks from firms with low ESG ratings (“sin stocks”) perform better than other stocks. This suggests that the stocks are undervalued, perhaps because people have a preference for less harmful stocks, and that the market has not taken advantage of this opportunity.

Critical mass hypothesis for the cost of capital
Even if divestment does have an effect, having a significant effect may still depend on convincing a critical mass of investors to divest. The idea is that once the divestment reaches a certain point, norms in the market begin to shift, pushing further divestment and
reinforcing the process (Ansar, Caldecott, and Tilbury 2013). How large this critical mass has to be is unclear. However, given even fossil fuel divestment campaigns have not been successful in achieving majority divestment, this is likely to be difficult.

Further, Ansar et al. (Ansar, Caldecott, and Tilbury 2013) suggest that a kind of wave structure describes how divestment occurs. Within each past divestment movement, they suggest that divestment comes in three waves. This begins with religious and public groups, then runs through universities and public institutions, and finally is followed by the wider market. A wave structure suggests that acts of divestment short of a critical mass may still influence others to divest, potentially leading to the next wave of divestment until the critical mass required to affect the cost of capital is achieved.

**Empirical evidence of indirect effects**

The case for indirect effects is stronger. Indeed, activists generally view these effects as the primary reason to pursue divestment campaigns (Hestres and Hopke 2020; Bergman 2018). These indirect effects centre around a stigmatisation process. The industry is attacked and delegitimised, with its social sanction to operate revoked. Confidence in the industry and its future is undermined.

Divestment also has good symbolic potential as an activist technique. Divestment can undermine the moral licence of an industry. It has an abolitionist appeal, symbolically suggesting ending the industry and moving towards alternatives, contrasting with milder proposals to reform the industry. In this way, divestment encourages people to imagine the end of the target industry and can help people see beyond a current reliance on it (Hestres and Hopke 2020).

The arguments used in this stigmatisation process are not solely moral arguments. It is also common to argue that investing in the industry does not make financial sense since it is in decline. This claim is typically based on the potential of public pressure from the divestment campaign to damage the industry. It may also be made based on other risks to the industry, such as the risks of being outcompeted by
renewable technologies in the case of the fossil fuel industry.

This line of argument has been particularly prominent in the campaign divest from fossil fuels, where fossil fuels are portrayed as “stranded assets” which can never be used (Lipman 2021). This terminology of “stranded assets” has already been used to describe the capital sunk into agriculture (Caldecott, Howarth, and McSharry 2013), suggesting this could be a fruitful avenue to pursue.

**The consequences of stigmatisation**

This stigmatisation process can have significant effects on the targeted industry. Much like the reputation of an individual, an organisation’s reputation has far-reaching effects. Companies in a stigmatised industry will have trouble finding new contracts, maintaining existing contracts, selling products, and attracting talented workers (Ansar, Caldecott, and Tilbury 2013). Devers et al. (Cynthia E, Devers, Todd Dewett, Carrie A. Belsito 2005) discuss research suggesting that organisations and individuals will minimise or completely sever ties with stigmatised organisations, likely causing them economic damage.

In one case, when it became known that a company had gone through a bankruptcy, some suppliers stopped sending parts to them while others began sending defective parts (Sutton and Callahan 1987). Companies typically assign a fairly high priority to their reputations and spend large sums on improving them, supporting the view that a company’s reputation is important (Hutton et al. 2001).

Another example is the Russian oil giant Rosneft. Though they produce approximately the same amount of oil each day, as of June 2013 Rosneft was valued at approximately $88 billion, compared to $407 billion for ExxonMobil (Ansar, Caldecott, and Tilbury 2013). This has been attributed to the stigma of weak corporate government on the part of Rosneft. However, if accurate, weak corporate governance is a real sign of corporate weakness, and not just unjustified stigma.

Companies in the industry may also respond to this pressure in positive ways through reforms that improve welfare. However, they may respond to the criticism and in other ways that do not represent improvements, such as...
rebranding or diluting the stigma by expanding into other industries (Ansar, Caldecott, and Tilbury 2013).

Governments may also respond to the criticism through legislative changes meant to regulate and reform the industry. Ansar et al. (Ansar, Caldecott, and Tilbury 2013) argue legislative changes have been a reliable consequence of large divestment campaigns. However, this is just based on observational evidence from their case studies as they do not attempt to isolate effects and establish causality. It may be that the legislative changes would have happened without the divestment campaign, particularly as widespread divestment only occurs when a large percentage of the public are already onboard with the issue.

In the case of animal agriculture, a divestment campaign could influence governments to reduce subsidies to animal agriculture, because this is a natural extension of the call to divest. Reducing subsidies to the industry may well be more effective than investor divestment as long as this does not shift consumption to smaller animals.

Some believe that these campaigns must be viewed holistically and that this kind of reductionist analysis is out of place here (Hestres and Hopke 2020). However, for comparing the strength of different campaigns, we see no good alternative.

Existing campaigns that already serve this role in animal advocacy

Though the evidence is not completely clear, the stigmatisation process appears to have a fairly strong negative effect on the industry, which would be an argument for divestment. However, there are many other animal advocacy campaigns that involve a similar stigmatisation process such as veganism or reducetarianism, corporate campaigns, and policy change campaigns. Veganism and vegetarianism even work through the similar principle of a boycott, and the symbolism is largely the same. Moreover, since the

1. “In almost every divestment campaign we reviewed from adult services to Darfur, from tobacco to South Africa, divestment campaigns were successful in lobbying for restrictive legislation affecting stigmatised firms. One of the most important ways in which stigmatisation could impact fossil fuel companies is through new legislation. In almost every divestment campaign we reviewed from adult services to Darfur, from tobacco to South Africa, divestment campaigns were successful in lobbying for restrictive legislation affecting stigmatised firms.”(Ansar, Caldecott, and Tilbury 2013)
arguments for the direct effects of these campaigns are much stronger, divestment appears to be a generally weaker campaign option in the animal advocacy context.

If the direct effects of divestment are not substantial, campaigning for divestment may also confuse people into taking actions that help fewer animals (Braungardt, van den Bergh, and Dunlop 2019; MacAskill 2015). This would be promoting a course of action with minimal direct impact to people who might have otherwise taken more impactful direct action such as working to reduce the consumption of animal products. However, if the intentions behind the campaign are made clear (as advocates for divestment typically have been), we can reduce this confusion and avoid dishonesty. This would acknowledge that the direct effects are minimal, but that the campaign is being pursued primarily for the indirect effects (Hestres and Hopke 2020).

A divestment campaign aimed at these indirect effects may also be a circuitous way of achieving these goals compared with directly arguing for them (Hillebrandt 2018). Normally directly arguing for what you want will be more effective than relying on a circuitous indirect causal chain to achieve that thing.

**Potential remaining activism benefits of a divestment campaign**

One advocacy benefit of a divestment approach over veganism could be that a divestment approach has an institutional focus rather than individual focus. An institutional focus centres the target industry in the conversation, assigning responsibility to them rather than to individuals and their actions as consumers. There are arguments that an institutional focus may be more effective and that this approach may be neglected in animal advocacy (Reese 2020).

An institutional focus may be more effective since it does not blame individual members of the public and therefore may be easier for them to accept. Members of the public may have fewer options for working against the problem (other than the boycott or semi-boycott that veganism or reducetarianism represent), since the principal power to enact change is often in the hands of corporations. Evidence about what has worked for past historical movements also generally
supports an institutional focus (Reese 2020). On the other hand, an individual focus may have a clear call to action, have more measurable results, and be more actionable (Sentience Institute 2019).

However, if we are persuaded that an institutional focus is more effective, there are tried and tested campaigns that have an institutional focus, including corporate campaigns and campaigns for legislative change. Therefore, there again does not seem to be any special reason to choose divestment campaigns over existing campaign strategies with stronger direct effects.

Another reason activists sometimes cite for divestment is a “radical flank effect”. This describes how having some advocates with more radical positions may add legitimacy to more moderate activists (including them in the Overton window), even if the radical positions are not taken seriously in themselves (Bergman 2018). However, there are no shortage of other potential radical campaigns that animal advocates can begin, so this does not provide a strong reason to choose divestment over another animal advocacy campaign.

One aspect of divestment campaigns that could arguably fill a unique niche within animal advocacy is that they stigmatise and attack the industry on a financial level. This is arguably a particularly sensitive issue for the industry since finance is vital for its survival (Farming n.d.).

**Movement building potential of divestment**

Divestment has been touted as having movement building potential. One reason for this is that it allows groups to take concrete action against a harmful industry (Hestres and Hopke 2020).

Being able to take action to advance the cause is important for maintaining committed advocates since consonant behaviours reinforce attitudes (Vestergren, Drury, and Chiriac 2018; Perlovsky 2013). By performing actions that are typical of activists, people may increasingly come to think of themselves as activists. Wishing to stay consistent with that self-image, they are in turn more likely to engage in more activism (Burger 1999).

Divestment may be especially helpful in this regard because it allows groups to act against a harmful industry, even in
cases where the industry is geographically distant from them (Hestres and Hopke 2020). It may also be easier to perform than other types of actions against the industry. Without an outlet of this kind, activists can feel powerless against the problem and begin to lose motivation (Bergman 2018).
Socially responsible investing has a long history. An early example is the Quakers’ divestment from the Atlantic slave trade (Kölbel et al. 2019). However, the most significant examples began in the 1980s, with the idea growing in popularity since then.

Many large divestment campaigns have ostensibly been successful in causing large amounts of divestment as well as reputational damage to the companies. However, the direct effect of these campaigns on the company’s finances and practises are less clear. The three cases discussed in this section are divestment from apartheid-era South Africa, divestment from tobacco, and divestment from fossil fuels.

Apartheid-era South Africa divestment movement
First proposed in the 1960s, divestment from South Africa began in 1978 at a large scale as a result of the public outcry against apartheid. The goal was to end apartheid through the pressure of the campaign. The movement ended in the early 1990s as apartheid legislation began to be repealed (Ansar, Caldecott, and Tilbury 2013).

More and more organisations took the call to action in divesting from South Africa. In the US alone, 26 states, 22 counties, 90 cities, and 155 colleges had taken some kind of economic action against South Africa before 1990 (Knight 1990). Companies also faced stigma for working with or in South Africa. Between 1985 and 1990, 200 US companies divested from South Africa, leaving only 130 US companies still working in the country (Knight 1990).

Soon national governments began to follow suit and implemented progressively harsher divestment, embargoes, and sanctions against South Africa. The Comprehensive Anti-Apartheid Act of 1986 in the US was the most significant example of this, implementing significant sanctions against South Africa including banning new investment and enacting significant trade restrictions (Gan 2019). However, it is worth noting that the act may have been poorly enforced (Knight 1990).

Lending from US banks to help cover the $23 billion in South African foreign debt declined from 4.7 billion in 1984 to 1.3 billion in 1985 (Ansar, Caldecott, and Tilbury 2013; Knight 1990). Net
amount divested (net capital flight) as a result of this campaign between 1985 and 1989 has been estimated at $2.3 billion, 10% of South Africa’s foreign debt (Knight 1990).

This meant that South Africa was unable to pay back its foreign debt on time and was forced to implement costly measures to mitigate the crisis such as exchange controls in 1985 (Knight 1990). This meant that South African residents generally could not withdraw capital from the country and foreign investors faced stiff financial penalties for doing so. The currency was also devalued while inflation reached double digits (Knight 1990).

Because of the strong effect these legislative changes may have had, it is hard to disentangle and isolate the effect of the divestment campaign on South Africa. It is not clear if the divestment campaign itself had significant direct impact on South Africa or if any other campaign against South Africa might have had similar effects. It may be that there was simply a great deal of enthusiasm for working to end apartheid and alternative advocacy strategies would have worked at least as well. The debt crisis itself might have been unrelated to the campaign because a number of other countries also went through debt crises at this time (Ansar, Caldecott, and Tilbury 2013).

Taken as a whole and including the legislative changes, it appears that the campaign may have been successful in getting the South African government to end apartheid (Gan 2019). However, when we try to isolate the effect that divestment had in this context, it becomes very hard to attribute this success to divestment specifically.

There are some reasons to think that this ask was stronger in the case of South Africa:

1) There were fewer alternative options for acting against apartheid available to people outside of South Africa because of the geographical distance. It is important that there are some actions people can take against the industry they are opposing, in order to reinforce behaviour change (in this case opposition to apartheid).

2) Debt financing (such as South African government bonds) played a large part in the case of divestments from South Africa(Knight 1990).
Divestment from debt generally has a more significant impact on the target because it provides more financing and because the market for debt financing is less efficient. This could be expected to put pressure on the South African government (Quigley, Bugden, and Odgers 2020; Halstead 2020).

**Tobacco divestment movement**
Divestment from tobacco began in 1978 in response to growing awareness and concern around its health effects (Fisher 2000). First, the American Medical Association was pressured to divest its members' assets from the tobacco industry. When the AMA rejected this call to divest, they faced significant public backlash, leading to them selling their $1.4 million of stock in the industry. Other organisations, such as Harvard University, soon followed suit because of the publicity around this case (Gan 2019).

This was the first of four waves that the tobacco divestment movement went through. Despite the large media coverage and the public outcry over nearly four decades, a critical mass of divestment was never achieved. Only about 80 of the over 1000 invested organisations ever engaged in significant divestment from the industry (Ansar, Caldecott, and Tilbury 2013). The total amount withdrawn from the tobacco industry was quite low:

“According to Social Funds the tobacco divestment outflows total only about $5 billion as shown in Figure 21. Contrast this with the $500 billion market capitalisation of big tobacco companies in 2013, which has been growing at a compound annual growth rate of nearly 15% since 1995.” (Ansar, Caldecott, and Tilbury 2013)

Moving to the modern day, most analysis suggests that the direct effects of the divestment campaign on the current finances of the tobacco industry has been minimal or non-existent (Ansar, Caldecott, and Tilbury 2013). However, there have of course been significant legislative changes, including increased taxes on cigarettes and much tighter restrictions on the locations at which you are permitted to smoke (Leber 2015).

Nevertheless, the tobacco industry is doing well despite those changes, with a market capitalization of $818 billion (Nilsson 2021). The industry is predicted to grow at a rate of 1.8% per year, with the largest consumption in the
Asia-Pacific region and the highest rising consumption in Africa and the Middle East (Grand View Research 2021). The tobacco industry is regarded by many investors as an extremely profitable investment opportunity (Gethard 2021).

Some companies have attempted to rebrand. For example, Philip Morris ($155 billion market share) has rebranded as being conscious of the health of their consumers, attempting to dilute their stigma by moving into the healthcare and wellness industry with their “beyond nicotine” strategy (Nilsson 2021). However, sales of health products and healthy alternatives account for just 5% of total company profits, so this reform seems superficial (Nilsson 2021). The public largely also have not bought the attempted rebrand, with 70% viewing the industry unfavourably (Truth Initiative 2019).

Fossil fuel divestment movement
The fossil fuel divestment movement began around 2011 at Swarthmore College in Pennsylvania when students asked the college to divest from all fossil fuels (Lipman 2021). It soon spread to other US colleges (Gan 2019). It has since seen a meteoric rise to become a worldwide phenomenon. It is the fastest-growing divestment movement in history, with the total funds pledged as divested from fossil fuels increasing by 75 times since 2014 (Lipman 2021; Gan 2019).

The guiding idea behind the movement is that we cannot safely burn even our current fossil fuel reserves, and so we should stop investing in and expanding the industry. It portrays fossil fuels as “stranded assets” for which investment makes no moral or financial sense. The report Unburnable Carbon was influential in spreading this idea and building the movement, and the article Global Warming’s Terrifying New Math helped propel it into mainstream discourse (Bergman 2018).

A total of US$39.2 trillion of assets under management (around one fifth of global assets under management) have been promised for divestment from fossil fuels. However, only a small amount of this has actually been divested (Gan 2019; World Bank n.d.; Lipman 2021). The largest singular event was the divestment of $9 billion of Norway’s sovereign wealth fund from coal, though this was only around 1% of the fund’s total (Gan 2019).
Oil prices have seen record-breaking lows in recent years, in part because of the Covid-19 pandemic (Ambrose 2020). US coal has fared particularly badly, with the industry shutting down 200 mines and losing 76% of its value within five years (Mathiesen 2015). Despite this, the broad trend has still been favourable with an evaluation of investments made by US universities finding that oil and gas shares have seen a 11.5% increase over the last 10 years, compared to an average return of 5.6% among the universities’ other investments (Shapiro and Pham 2012).

The fossil fuel divestment campaign is unusual because of the massive size of the target industry: around 5% of the global stock market (BloombergNEF 2014). This means that divestment from fossil fuels is more difficult and potentially more costly than divestment from tobacco or South Africa. Investors who divest will end up with a less diversified portfolio as they exclude a larger part of the market.

One potential lesson from the fossil fuel divestment movement is that it may be good to emphasise animal agriculture as a dying industry that will be replaced with more ethical industries, such as cultured or plant-based meat products. Also following in the footsteps of the fossil fuel divestment movement, this could be accompanied by a call to invest divested assets into these alternative ethical industries (Quigley, Bugden, and Odgers 2020).
Previous investment campaigns have been quite successful in getting large numbers of investors to divest from harmful industries. Roughly 20% of investments are currently done according to “strict socially conscious investing” (Halstead 2020). However, as described in the tobacco divestment campaign, the actual amount divested may be much smaller than this figure suggests and “strict” may be too strong of a word.

Enthusiasm for one divestment campaign may carry over into enthusiasm for a new divestment campaign, such as divesting from animal agriculture. For example, Hampshire College, the first organisation to divest from South Africa, was also the first to divest from fossil fuels (Lipman 2021).

The effect of divestment on investment returns

The effect of divestment on investment returns contributes significantly to whether people will accept the call to divest. To our knowledge, there is mixed evidence on this point.

The theoretical argument here is that reducing the investment options available to an individual by not investing in the target industries reduces the number of stocks they can choose from, and thus should reduce returns. From this theoretical perspective, it is difficult to see how reducing options can lead to increased performance (Hillebradit 2018).

Organisations that have resisted divestment, such as Cambridge University in response to fossil fuel divestment campaign, often cite the financial risks associated with making their investments less diversified, as well as difficulties disentangling their highly diversified portfolio from any investment in fossil fuels, as key reasons (Quigley, Bugden, and Odgers 2020).

Actual empirical evidence on the subject is also unclear. It is difficult to isolate any effect there might be from the noise of the highly variable performance of stocks (Hillebrandt 2018). One example here is that an analysis of Norway’s decision to divest its sovereign wealth fund ($860 billion) from tobacco found that this cost them $1.96 billion over the period from 2006 to 2015 (Marriage 2016). However, the overall evidence is mixed, with some evidence suggesting that divestment from “sin stocks” causes
underperformance, some evidence that this leads to normal performance, and some evidence suggesting that divestment causes overperformance (Hunt and Weber 2019).

**Public opinion**

We can expect public opinion towards animal welfare to be weaker than public opinion towards public health or towards the environment. Using the environmental or human health arguments against animal agriculture can strengthen the case though, particularly because support for the environment is at an all-time high and divestment is already a popular strategy against the fossil fuel industry (Carrington 2019). For example, student referendums at Harvard University and the University of North Carolina showed 72% and 77% support respectively for divestment from fossil fuels (Guardian staff reporter 2013). However, these arguments apply most strongly to divestment campaigns that specifically target red meat, and this focus comes with the risks inherent to the small animal replacement problem (described below).
ESG investing in relation to animal agriculture is dominated by The FAIRR Initiative, which is a coalition of investors led by Jeremy Coller. FAIRR claims that the members of the coalition have a total of $48 trillion in assets under management (at the time of writing).

$48 trillion in assets under management is a colossal amount, equivalent to around one quarter of the stock market (Roxburgh, Lund, and Piotrowski 2011). However, FAIRR is not a radical organisation, and should not be compared to full divestment movements. FAIRR educates people on the risks of animal agriculture and joining does not amount to a commitment of any kind. Many join FAIRR just to access their research. Very little of this amount is actually divested from animal agriculture, which is not to detract from FAIRR’s impressive work on the subject (personal communication).

Some other investment firms and brokerage platforms including Boston Common Asset Management, Clean Yield Asset Management, Folio Investing Brokerage, Rocky Mountain Humane Investing, and Trillium Asset Management are divesting from some industries that cause animal suffering (Tyler 2020).

Various other advocacy organisations have campaigns to divest from animal agriculture (World Animal Protection 2021). These organisations include Feedback, Friends of the Earth U.S., Global Forest Coalition, Sinergia Animal, World Animal Protection, Bank Information Center, International Accountability Project, and 50 by 40. Pivot Foods Investment and Defund Factory Farming are particularly notable for their strong focus on the subject (PFI n.d.; DFF n.d.). Feedback Global is also notable for its large focus on this issue (FG 2018).

However, the overall amount of funding that goes to divestment within the farmed animal advocacy movement is quite low. In the ‘Farmed Animals Funders State of the Movement Report’ (Funders 2021), the category of “Investment/Divestment” received the lowest proportion of funding with any of the categories used. The counterfactual of how the industry would have performed financially if
divestment campaigns were not run is also relevant. To the extent to which the "stranded assets" arguments are correct, these industries would already be at serious risk and we should expect them to have poor counterfactual financial performance. The divestment campaign may help the market incorporate this information more quickly, but the market would likely have reacted eventually anyway.

This could explain away the apparent success of divestment campaigns. If divestment campaigners choose which industry to target based in part on the financial risk associated with the industry, it is hardly surprising if the industry ends up performing poorly. This makes it especially important to be able to isolate the effect that the divestment campaign is having. Unfortunately, there is almost no available evidence that tries to isolate the effects in this way.

Because of the importance of a “tipping point”, there are probably not strong diminishing returns to work on divestment even if the campaign space were relatively crowded.
To complement our review of the evidence we interviewed some relevant stakeholders working in ESG investing, activists, as well as researchers who had previously examined the effects of divestment or impact investing. Among these individuals there was general agreement that the financial impact of divesting on the cost of capital of firms was small or negligible for any individual or small institution. However, they thought there might be a significant effect if a larger mass of capital is divested either from a large number of individuals or very large institutions. All the same, some did note that they had not observed this to date with the fossil fuel divestment movement. Given this is the most successful divestment movement ever, they were sceptical that a new campaign for Animal Agriculture could achieve this effect any time soon. An exception to this was debt denial strategies of divestment, which all experts thought had greater potential for a direct effect on the cost of capital, though they were uncertain of the magnitude of this effect.

An area of disagreement amongst experts was the value and magnitude of indirect effects, and particularly stigmatisation. When looking at the effect this has had historically, all experts agreed that it was difficult, if not impossible, to disentangle the stigmatisation effect of these campaigns from the broader landscape of advocacy at the time. This makes the value of the stigmatisation effect particularly difficult to evaluate, leading to disagreement on the value of stigmatisation compared to other outcomes. However, when discussing alternative approaches for achieving stigmatisation available to the animal advocacy movement, they generally agreed that there was nothing particularly special about divestment for achieving this effect. Instead, other vegan outreach, undercover investigations, or corporate campaigns could achieve similar effects. The exception came from those more familiar with maximising media coverage, an important step to achieving stigmatisation. They thought that financial news outlets would be more likely to cover divestment announcements than the wider media would cover any other campaigns. One expert outlined the mechanisms they had used to maximise the stigmatisation effect of an institution they convinced to
divest, explaining that similar institutions achieved much less media coverage even when they were as or more trusted. Their suggestion was that for many campaigns, stigmatisation could be achieved through intelligent use of the media rather than relying on the inherent nature of the campaign.
Market rationality versus irrationality

As discussed in the evidence section, the extent to which markets are rational versus irrational directly affects how effective we should expect divestment to be. Though the weight of evidence and the views of experts tend to favour the side of market rationality, this is still a large outstanding question in economics.

Some experts argue that the extent to which markets are efficient is exaggerated. The Keynesian beauty contest is one theory of market irrationality. This argues that stock prices are determined as a sort of popularity contest, rather than being an independent reflection of their true value. Under this theory, picking the right stock should not involve finding the “true value” of the stock to see if it is undervalued; it just involves assessing what other people think the best stock is (The Decision Lab 2021).

Examples of so-called irrational exuberance — cases where what looks like pure enthusiasm drives up the price of the stock — argue in favour of market irrationality (Hayes 2021a). The differing performance of many cryptocurrencies, which are almost exact functional clones of other cryptocurrencies except for the different names and framing of those cryptocurrencies, is strongly suggestive of a beauty contest. For example, Dogecoin was created as a joke and is functionally nearly exactly the same as bitcoin (Chohan 2017). Despite not having any features to recommend it over any of the other clones of bitcoin, Dogecoin has a market capitalisation of $22 billion as of the time of writing.

To the extent to which this is true, divestment could be an effective strategy because it makes the stocks unpopular. The sagging popularity could in turn have a self-reinforcing effect causing it to lose more and more popularity. This could generate an effect that is the opposite of a bubble, causing significant harm to the targeted industry.

However, even some proponents of these popularity theories acknowledge that, in the long run, the true value of the stock is important (NPR 2011; Keynes 2002). There is, then, general agreement on the view that direct effects from divestment should be minimal in the long-term.
Small animal replacement problem
The small animal replacement problem refers to the replacement of larger animals with smaller animals, thereby leading to an increase in total animal suffering (CE Team 2018). Adding to the problem, there are typically lower welfare standards for smaller animals.

Since most of the pressure for divestment comes from arguments based on the climate impact of animal farming, divestment may be more likely to target animal agriculture businesses with the highest carbon footprints. In particular, since cows have a much higher carbon footprint than other animals, this ask may differentially disrupt cow farming, raising the price of beef and milk relative to other animal products. For example, Jeremy Coller, head of the FAIRR Initiative, coined the phrase “cows are the new coal” (Baker 2021).

There are far fewer animals involved in cow farming to produce the same quantity of animal products and the welfare of larger animals is typically higher. Therefore, there is a risk of divestment causing an increase in animal suffering, or a smaller decrease than would otherwise be expected.

In order to try and avoid this, divestment campaigns should focus on a blanket divestment from all animal agriculture. However, because of the greater salience of the environmental arguments in the minds of most people, there is still a risk of the small animal replacement problem even from campaigns that try to avoid it. This is especially true if environmental arguments are often used in the campaign.

This may be a particularly pressing problem for divestment. Since divestment campaigns are meant to start a chain reaction of pressure against the industry, including inspiring media coverage and incentivising new activists to join the movement, the final results are not under the control of the activists who begin the divestment campaign. This means that even if activists are careful in their messaging to try and avoid the small animal replacement problem, the end result of the corporate and legislative changes may not be aligned with this.

Investment based on ESG (environmental, social, governance) rating is one common approach that is lighter than full divestment. If this approach is taken, rather than a blanket
disinvestment from animal agriculture, the farming of large animals may be differentially negatively affected because of their lower scores, again leading to the small animal replacement problem. There are some signs of this from the FAIRR Initiative. They rank aquaculture as outperforming all other sectors of animal agriculture across all risk factors (Shoup 2021). Aquaculture represents the largest numbers of farmed animals as well as typically some of the lowest welfare standards. Any risk that divestment might inadvertently lead to the expansion of aquaculture should, therefore, be taken seriously.

Further, in FAIRR’s writing to assess risks to investors of investing in animal agriculture, environmental arguments are much more prominent than animal welfare arguments (FAIRR 2016). For example, animal welfare is only one of the 10 critical risk and opportunity factors listed in their FAIRR Protein Producer Index (FAIIR 2021). Only one other factor, sustainable (alternative) protein, directly relates to animal welfare. In contrast, four of the factors are environmental.

If the investors are persuaded based on these or similar environmental arguments, it is likely that they will preferentially divest from animal agriculture involving larger animals like cows. This will differentially harm the farming of larger animals, likely shifting consumption to smaller animals with a consequent degradation in overall animal welfare.

**Shareholder efficacy as an alternative to divestment**

Stakeholder advocacy refers to stakeholders in a company pushing for changes in that company. To the extent to which stakeholder advocacy is effective, it presents an alternative and opposing option for advocacy. Rather than divestment from the harmful industry, stakeholder advocacy suggests we should invest in that industry in order to be in a better position to push for changes to it. Indeed, the evidence for shareholder advocacy directly causing changes in corporate policy is much stronger (Kölbel et al. 2019), a finding that is at least somewhat at odds with divestment being an effective advocacy strategy.

Kölbel et al. (2019) discuss a number of analyses of shareholder requests, finding success rates (i.e. the requests being
implemented) of between 18% and 60%. Even 18% is substantial given the high value that many requests might have and the low cost of making a request. However, some question if agreeing to these requests is often just a token gesture, with little follow-through action (Lipman 2021).
We think that, given the existing evidence, many existing animal advocacy campaigns will be more effective and less risky than divestment. There are three principal reasons for this:

1) The evidence base for divestment is not strong and does not clearly support its efficacy. There is a lack of evidence that attempts to causally isolate the effects of divestment. Without this evidence, we cannot be sure that existing and previous divestment campaigns have caused the effects that are often attributed to them. Moreover, there is evidence that the direct effects from divestment on the cost of capital are minimal.

2) Within animal advocacy, there are already existing campaign types that involve the stigmatisation process but have stronger direct effects. The stigmatisation process does appear to cause real harm to the industry, but unlike in other cases like apartheid-era South Africa, there are other ways of achieving this in relation to animal agriculture.

3) More so than in other divestment movements, there is some risk of divestment from animal agriculture causing harm. This is because companies that farm larger animals will likely be more damaged by environmental arguments used to achieve divestment. This may shift consumption toward smaller animals, potentially increasing the total number of animals farmed.

The small animal replacement problem is the most significant remaining uncertainty given the risk it poses of the ask becoming of net harm. A better analysis attempting to model how likely this is to occur would be helpful. Additionally, a more thorough analysis of whether current divestment campaigns risk causing this problem would be helpful. It would also be very useful to find better evidence that more rigorously assesses the causality of divestment campaigns.

Finally, though most advocates do not believe direct effects are the primary reason for pursuing divestment, a better understanding of the strength of the direct effects would also be valuable.


