

# ESG INVESTING

## Virtue is its Own Reward Or One Mans Ceiling is Another Mans Floor

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Negative screening is a common application of Environmental/Social/Governance (ESG) investing. It avoids “sin stocks” and divests from industries or firms deemed immoral or having poor or undesirable standards along one of the three E, S or G dimensions.<sup>1</sup> It’s promoted largely on the fact that it’s virtuous. While we may all define virtue differently, advocating for it in this way is fair and appropriate. However, employing these constraints is also often promoted as enhancing expected returns. That is, if you avoid certain companies, industries, and even countries, that are deemed non-virtuous, you should expect to make more money over time.<sup>2</sup> Do good and make the same return or more! This is mostly wrong and, more the point here, actually at odds with the very point of ESG investing. Pursuing virtue should hurt expected returns. Some have discussed this fact.<sup>3</sup> But, it’s still not widely understood or broadly accepted. This seems to arise from investment managers selling virtue as a free lunch, and from investors who very much want to believe in that story. In particular, and my focus here, accepting a lower expected return is not just an unfortunate ancillary consequence to ESG investing, it’s precisely the point (though its necessity may indeed be unfortunate). As an ESG investor this lower expected return is exactly what you want to happen and really the only way you can effect the change you seek.<sup>4,5</sup>

First there’s the very basic thing. Constraints can never help you ex ante and only sometimes ex post through luck. Why? Because if they help they aren’t constraints, they are [what you want to do anyway](#). So, if you say your portfolio is better with a negative screen, you are saying that the old evil you who didn’t care about ESG issues also didn’t like more money.<sup>6</sup> Many commentators do indeed seem to (implicitly and sometimes explicitly) say that constrained portfolios are ex ante better. The opposite, that judged purely on return and risk constrained is always ex ante less than or equal to unconstrained, is really an important concept and still surprisingly often misunderstood. Constraints are needed to push you to do things you otherwise would not do, not to do things you’d do anyway out of self-interest.<sup>7,8</sup>

Put simply, if two investors approach an asset manager, one who says “just maximize my return for the risk taken” and the other who says “do that but subject to the following constraints,” it is simply false and irresponsible for the asset manager to assert that the second investor should expect to do as well as the first, except in the case where those constraints are non-binding (and therefore not relevant). Even in that case, it’s still irresponsible to say that the second investor should expect to do better.<sup>9</sup>

But, while important and sometimes misunderstood, the argument that ex ante constrained is less than or equal to unconstrained is actually rather trivial. The more interesting thing is precisely how ESG investing really makes an impact. It turns out that the ESG investor making less and the slimy sin investor making more, than they all would in the absence of the ESG investor’s self-imposed constraints, is precisely what the ESG investor wants to happen. That’s kind of cool in a math-econ-geek sense (as we’ll soon see as a human it’s kind of annoying).

What happens when one group of investors, call them the virtuous, simply won’t own a segment of the market (the sin stocks)? Well, in economist terms the market still has to “clear.” In English, everything still gets owned by someone. So, clearly the group without such qualms, call them the sinners, have to own more than they otherwise would of the sin stocks. How does a market get anyone, perhaps particularly a sinner, to own more of something? Well it pays them! In this case through a higher expected return on the segment in question. This may be unpleasant but it is just math (like math could ever be unpleasant). In the absence of extra expected return the sinners would own X of the market segment in question. The only way to get them to own X+Y is to pay them something more. Now, assuming nothing else changed, how does the market assign this sinful segment a higher expected return? Well by according it a lower price. That is, if the virtuous decide they won’t own something, the sinners then have to, and they have to be induced to through getting a higher expected return than otherwise. This in turn is achieved through a lower than otherwise price.<sup>10,11</sup>

Now for the fun part. How do the virtuous actually make the world a better place? Well to make the world a better place you want the sinning companies to sin less not just to suffer in the stock market. Does the above deliver this desired effect? Yep. Imagine a sinful company is considering a new investment project. How does it analyze this project? Well, as many of us were forced to learn in business school, it forecasts out cash flows, both positive and negative, and discounts those cash flows back to the present. If the final number is positive (a positive “NPV” in the parlance), and simplifying a bit for other complications like mutually exclusive projects, it undertakes the venture. Now I snuck in the assumption that the company knew the forecasted cash flows and the discount rate. I’m going to stick with the first assumption, that the actions of our virtuous and sinful investors don’t affect the forecasted cash flows of this potential project.<sup>12, 13, 14</sup>

But we can’t make this assumption for the discount rate as we know it is false and we know in which direction it’s false. Discount rates are in fact expected returns (and this is where we get our essay’s sub-title cut from [Rhymin’ Simon](#) as one man’s discount rate is another man’s expected return). Earlier we showed that investors will demand a higher expected return from the sinful companies, due to shunning by the

virtuous and the necessity to bribe the sinners to hold more of them.

It also directly follows that the sinful companies will have to use a higher discount rate (or, perhaps more clearly in this case, “cost of capital”) in their “should we undertake this project?” calculations. This is truly Finance 101.<sup>15</sup> That means quite simply that fewer sinful projects will show positive NPVs and fewer will be undertaken.

Put simply, if the virtuous are not raising the cost of capital to sinful projects, what are they doing? How are they actually affecting the world as they wish to? If the cost of capital isn't also an expected return, what is it? This might be a painful reality to swallow for the virtuous. To get precisely what they want, which is less of the bad stuff occurring, they have to pay the sinful investors in the form of a higher expected return.<sup>16</sup> Importantly, this isn't an accidental byproduct of ESG investing. It's the only way all this really matters one drop to the central issue – how much bad stuff happens. If the discount rate used by sinful companies isn't higher as a result of constraints on holding sinful stocks then there was no impact. And, if the discount rate on sin is now higher, the sinful investors make more going forward than otherwise.

Frankly, it sucks that the virtuous have to accept a lower expected return to do good, and perhaps sucks even more that they have to accept the sinful getting a higher one.<sup>17,18</sup> Well, [embrace the suck](#) as without it there is no effect on the world, no good deed done at all. Perhaps this necessary sacrifice is why it's called “virtue.”

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[1] In this essay I'll focus on this negative screening. ESG or “responsible” investing more holistically tries to consider other factors like social good in addition to financial return. Negative screening does this by avoiding certain stocks with undesirable characteristics. However, my arguments also apply to other types of ESG investing which encourage investors to invest in certain companies because of positive characteristics that are distinct from financial return (we'll call those strategies “positive screening” in this discussion). My argument's sign simply changes as needed.

[2] Or in the case of positive screening, if you invest extra in certain companies, industries, and even countries, that are deemed virtuous you should expect to make more money over time.

[3] See, for instance, [Dimson, Marsh, and Staunton](#) (Credit Suisse Global Investment Returns Yearbook 2015, pp. 17-27), [Kacperczyk and Hong](#) (Sauder School of Business Working Paper 2006), and [Chava](#) (Georgia Institute of Technology Working Paper, 2014).

[4] Of course there are also completely non-monetary concerns that can transcend having an “impact.” One could have no hope of making an “impact” and still divest under the “I will not make money from that undertaking” argument. Nothing I write about here contradicts that.

[5] Full disclosure, AQR pursues negative screening (and in fact a broader ESG research agenda that has the potential to touch all our products) for our investors who desire it, and believe in its virtues. We just won't oversell negative screening as a free lunch and we will be clear about how virtue actually creates change in the world (by moving costs-of-capital).

[6] As usual a better portfolio can come from higher expected return or less risk. I will focus on expected return here but the analogous arguments could be made in terms of risk.

[7] It's easy to confuse this with two other concepts. One, some would agree with the idea that constraints can't ex ante make you better off but point out that what they're really implementing is a one-time view, a trade if you will, that the world will move towards the stocks better on these measures (and away from the sinner companies), and they'll benefit from this move by acting now (negative screening). While I'm professionally skeptical of big confident macro calls like this, which will always rise or fall not based on their forecast of the future but based on how much of that forecast is already in market prices, it's certainly reasonable. But, again, one doesn't need a program, a set of guidelines, binding constraints, or anything of the sort if this is your view. Why? Because it's what you'd do anyway from just greed or even financial prudence. Two, similarly some may believe that, for instance, some ESG factors are systemically underpriced so a tilt towards them is a good thing (not surprisingly AQR looks for such factors). For instance, if environmentally virtuous companies were also better companies and that wasn't fully reflected in prices (so tilting this way gives you an advantage). That's fine. But, again, no constraint is needed to push you to invest in a good factor judged purely on return and risk. If the constraint is binding, and changes the world at all, it must go past what you'd do anyway from pure expected return and risk concerns. If you believe in one or two above I'd argue you might look as if you're doing ESG investing, but you're really just doing regular old investing with an active view on how ESG is going to perform; an investor with the same view and absolutely no virtuous concern about ESG would do the same. A subtle distinction perhaps but I think an important one.

[8] [Guenster et al.](#) (European Financial Management, Vol. 17, Issue 4, pp. 679-704, 2011) make the case that ESG constraints improve risk adjusted returns but it takes time because the cost of capital is affected with a lag. I think it's very hard to distinguish the cost of a constraint once imposed from the effect of a constraint as it is being imposed. In principle imposing ESG constraints can help the returns of virtuous companies and hurt sinful ones, as a “shock”, but the ongoing existence of ESG constraints does the opposite. Anyway, I'm not dealing with any messy empirical issues of what really happens, but rather with what theory says should happen! Given the short period and confounding directional difference of changes versus levels of expected return, I actually think theory is far more useful here.

[9] As discussed in footnote 7, if this is just a trade it's a consistent view, but the ESG negative screening program has zero to do with it as you're doing what you'd do otherwise out of greed!

[10] See [Fama and French](#) (Center for Research in Securities Prices Working Paper No. 552, 2005) for a related more general discussion.

[11] Similarly, in the case of positive screening, if the virtuous decide they want to own more of something, the sinners then have to own less, and they have to be induced to do this through getting a lower expected return than otherwise.

[12] In reality this is a bit oversimplified as any change can affect all aspects of equilibrium, including expected cash flows (a butterfly beats its wings in China and all that). If we had to guess at other equilibrium changes from the above we'd probably guess that the non-sinful companies required expected return would go down a little (some part of the market now wants to hold more of them for non-return based reasons) and a bit more non-sinful stuff would occur (lower cost of capital so more positive NPV projects). Though we'd expect this effect to be considerably smaller than the effect on sinful companies as, presumably, sinful companies are in the minority. We might also expect these actions to slightly raise the required expected return on the whole cap-weighted market as everyone has to be induced to own less diversified portfolios (no sin stocks for the virtuous and extra sin for the sinful) making investing a slightly riskier proposition. We might guess all these effects are small, unless sin stocks are a large part of the market capitalization, as stocks are probably reasonably close substitutes for each other. Luckily magnitude is not part of my brief here. Finally, I only deal with the case of investors who negatively screen and simply don't own sin stocks. It is always possible that [more active engagement](#) can change the equilibrium for the better.

[13] One admitted flaw in my argument that "higher cost of capital implies fewer bad projects" is that not all projects have positive cash flows followed by negative ones. For example, an oil company choosing whether to repair a known defect in their offshore oil platform today, versus paying potential damages tomorrow, is more apt to defer maintenance if we successfully raise their cost of capital. A higher cost of capital generally shortens the time horizon of sin companies which in itself is not clearly good or bad. I'm going to assume, because I think it's true, that the world is still dominated by "regular" projects (invest now, positive cash flows later) so, generally, raising the cost of capital of the sinful projects has a positive "impact" as we get less of them.

[14] One of the many real world complications I'm ignoring is that it's more correct to talk about "projects" rather than "companies" when it comes to discount rates. In reality projects can all have different discount rates and a company can choose to do some and not do others. Real life is still even more complicated as the designation of "sin stock" or not is usually discrete (it's not done by projects but at the firm level). It's quite likely that the coldly (not virtuous) optimal thing for many firms to do is pursue "sinful" projects up to, but not past, the point where they get designated sin companies. Again, the real world is complicated. But, I think the general points (constraints are never ex ante helpful, and the way negative screening has any impact is to raise the expected return of sin) likely hold up.

[15] While beyond this essay to go further, the simple example of risk free one-period cash flows is instructive. If the proper discount rate is 5% for such future cash flows, it is immediately clear that an investor will also earn (the "expected return") 5% on such an investment. Discount rates (or costs of capital) are expected returns. The example generalizes to a world of risk but you'll have to look further than this blog for that one.

[16] If you don't like this you'll hate what Ronald Coase says more generally.

[17] If it helps, the movement to ESG investing will indeed hurt the prior investors in sin stocks as their cost of capital goes up and price down. It's the sin investors going forward (maybe the same entities maybe not) who get the higher expected returns.

[18] Or you can just reframe the answer. [Ghoul, Guedhami, Kwok, and Mishra](#) (Journal of Banking & Finance, Vol. 35, Issue 9, pp. 2388-2406, 2011) find that, empirically, firms that are more socially responsible have lower expected return to investors, but frame it as those responsible firms are more valuable and less risky. And they're probably right! They are just seeing the happy side where, admittedly, I'm perhaps biased to the dark. Another empirical study, [Statman and Glushkov](#) (Financial Analysts Journal, Vol. 65, No. 4, July/August 2009), finds a positive realized return advantage to tilting towards virtuous firms but a negative one from shunning sinners. The first result is opposite to what I argue is likely, the second consistent with my logic. Again I'm rather cynical we can get much out of such empirical studies; it's particularly hard over a time when there has been movement towards recognizing ESG characteristics which is an "event" that could cause realized returns to move opposite in sign to expected future returns.

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