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Anti-ESG Investing

This year Environmental, Social and Governance ("ESG") and climate investing came into the white-hot glare of the political spotlight. Some of Redwood Grove's past quarterly letters have discussed our concern about some ESG managers overstating their sustainability analysis. In 2022 a handful of institutional managers, including Goldman Sachs and DWS got slapped on the wrist for this behavior. However, the "Anti-ESG" movement, a politically motivated pushback against "woke capitalism," was not an attack on asset managers doing too little, but on those doing *too much*.

The rhetoric was followed by political action. During 2022, 19 state legislatures passed rules or official guidance with the apparent intention of banning ESG and climate considerations for state pension investments. As gluttons for punishment and as curious folks, Redwood Grove has read all the legislation and new guidance passed by the state legislatures. Most of the state anti-ESG legislation simply but explicitly seeks to limit investment decision-making to pecuniary factors. Like so much in state politics, these laws appear to be a lot of sound and fury signifying nothing. For starters, the 19 states' pension plans, mostly in Republican-led states, have never, to our knowledge, looked to take ESG or climate factors into account. The laws' passage is equivalent to banning someone from a place they have no intention of going. In addition, these legislatures appear to have conflated two concepts; impact investing and ESG investing. Impact investing is often concerned with non-pecuniary outcomes. ESG and sustainable investments typically look to achieve market equivalent or better returns by incorporating additional information into their analysis.

While most of the laws seem predicated on the idea that using a wider range of information to make investment decisions is bad, some states muddle things even more. For example, Oklahoma's new law known as the "Energy Discrimination Elimination Act of 2022"[1], requires that the state pension make a list of and then divest from any company that "limits commercial relations with" fossil fuel energy without an "ordinary business purpose."[2] The bill goes further banning investments in companies that *do business* with any of the divested companies. This bill is

[1] https://kfor.com/news/bill-to-limit-who-the-state-does-business-with-signed-into-law/
[2] http://webserver1.lsb.state.ok.us/cf_pdf/2021-22%20ENR/hB/HB2034%20ENR.PDF

way too broad to be functional. For example, due to concerns about the systemic risk to the financial system from climate change, the Federal Reserve has asked the six largest banks to complete a climate risk analysis.[3] These six banks already have some stated restrictions on lending to certain fossil fuel projects, all under the umbrella of ordinary business practices. Oklahoma could argue that these climate-driven restrictions do not constitute ordinary business practices. In which case investments in these banks would run afoul of the state's new law. The six largest banks would therefore be restricted from Oklahoma's state pension investments, as well as any companies doing business with those six banks. This would include an impossibly large swath of the investable universe, as well as the state of Oklahoma itself.[4] Alternatively, Oklahoma lawmakers would have to, at least implicitly, acknowledge that climate change and transitioning away from fossil fuels is an ordinary business purpose. Which seems unlikely to be the intention of this bill. It is hard to imagine this bill will be implemented as written. The legislative challenges to sustainable investing have largely been about scoring political headlines, not thoughtful paths forward.

On the federal level, some have attacked sustainable investing from a different angle. Senator Tom Cotton wrote a letter to BlackRock suggesting their involvement in the investor group Climate Action 100+ may violate antitrust law. (Note: Redwood Grove is a member of Climate Action 100+.) Senator Tom Cotton's and others stated concerns are sadly misplaced because Climate Action 100+ requirements are currently largely symbolic. Joining the organization simply asks asset managers to encourage portfolio companies to think about climate risk, reduce greenhouse gas emissions over time and improve climate-related disclosures. There are no penalties for not talking to management teams or for not voting proxies consistent with these objectives. Joining the group is simply an acknowledgment that climate change is happening and could present a business risk to some companies. This legislation and pushback are largely political in nature and a distraction from real-world solutions. We should be discussing corporate pathways to NetZero, which clean technologies have the most promise or the appropriate economic incentives.

Nonetheless the anti-ESG pushback is having a significant political impact on asset managers. Larry Fink, the head of Blackrock and formerly outspoken climate investing advocate, seemingly walked back three years of annual letters where he argued: "climate risk was investment risk."[5] When asked about the ESG pushback at Davos this month Mr. Fink highlighted that Blackrock is "the largest investor in hydrocarbons in the world…if you really read the CEO letters that I've written in the past I talk about a transition."[6] We have read his letters and this is a reframing of Blackrock's climate narrative. The second largest asset manager, Vanguard, caved earlier when they announced on December 7th, they were leaving the NetZero Asset Managers alliance, another organization to which Redwood Grove belongs.[7] The NetZero Asset Managers Alliance is also

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[3] https://www.federalreserve.gov/newsevents/pressreleases/other20230117a.htm
[4] https://www.ok.gov/treasurer/Banking/Merchant_Credit_Card_Processing/index.html
[5] https://www.blackrock.com/americas-offshore/en/larry-fink-ceo-letter
[6] https://www.bloomberg.com/news/articles/2023-01-17/blackrock-s-fink-says-esg-narrative-has-become-ugly-personal?srnd=premium
[7] https://www.reuters.com/business/sustainable-business/vanguard-quits-net-zero-climate-alliance-2022-12-07/

largely symbolic. However, the Anti-ESG/climate investing movement has created enough sound and fury that asset managers are walking back even their symbolic commitment to move toward a sustainable planet.

Economics of Climate Change

Redwood Grove has not changed its approach toward or commitment to climate investing since inception. We remain steadfast that understanding climate change remains critical to any fundamental investment analysis. We believe that because the economic impacts of climate change remain woefully unrecognized in market valuations, it is one of the last sources of market alpha for active managers. Redwood Grove continues to differentiate itself from ESG managers, as we do not rely on data aggregators or much of the underlying data as it is insufficient to determine which companies are well positioned for the economic megatrends created by climate change. Redwood Grove's investment process, focused on this market inefficiency, has enabled its portfolio to beat its benchmark over the 3-year, 5-year, and since inception periods.

One trend Redwood Grove has researched closely is the technological transition to a low-carbon economy. We have studied the history of energy transitions. Each transition is unique, impacted by idiosyncratic conditions like the amount of built infrastructure, speed until price parity, and the non-financial benefits of the replacement technology. Fortunately for us, most major transitions have copious amounts of academic research, particularly the more famous ones, like gas to electric and horse to car. Despite these variations, some summary observations can be drawn. Entrenched energy sources first peak, then plateau for 1-10 years, and then decline. Once the decline has started that energy source is headed toward obsolescence in a couple of decades.[8] This leads to price declines of that energy resource and eventually stranded assets.[9] Those interested in exploring further might enjoy RMI's research on the topic referenced in footnotes.

So what does that tell us about oil and the transition to a low-carbon economy? World oil demand is forecasted to be approximately 100mm barrels a day in 2023 about in line with the demand in 2019 and in our assessment has likely plateaued. While there are divergent views on this, BP's 2020 energy outlook also concluded that we are in the oil plateau era.[10] Events like Covid-19 and the war in Ukraine create short-term cyclical trends and may obfuscate this plateau. However, exploration and production companies appear to recognize the leveling of long-term demand. In 2022 they opted to return the majority of their profits to investors instead of investing in their core business and new reserves.[11] Our research leads us to believe there is evidence that oil demand has peaked. The recent supply-demand dynamics have been reflective of short-term

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[8] https://rmi.org/insight/peaks-why-they-matter/

[9] https://rmi.org/insight/peaks-why-they-matter/

[10] https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/energy-outlook/bp-energy-outlook-2020.pdf

[11] https://www.bloomberg.com/news/articles/2022-10-28/big-oil-faces-backlash-for-handing-record-profits-to-investors

idiosyncratic events common in a plateau period before the eventual decline. Redwood Grove's portfolio continues to reflect this thesis of peak oil demand.

Conversely, renewable energy sources replacing oil are being deployed faster than anticipated by energy experts. Successful energy replacements often experience asymmetrical growth particularly once they pass price parity. The first 5% of adoption often takes about as long as the next 50%. Forecasters have historically underestimated renewable energy's growth. The International Energy Agency (IEA) predicted in 2010 that there would be 12 GW's of solar installed in 2020.[12] In fact, in 2020, there were 135 GWs installed, over 10 times their estimate. Despite this past underestimation of growth in renewables, the IEA is now estimating "turbo" growth in renewables over the next five years. They forecast that globally renewable energy will see as much installed in the next 5 years as were in the prior 20 years.[13] While the long-term demand curves for fossil fuels and renewables look very different, over the last two years the S&P Energy sector (largely fossil fuel) is up 156%[14] and the S&P's clean energy index is down 22%.[15] Of course, recent price movements and demand curves do not tell the whole story and things like valuations matter.

Redwood Grove looks to invest in areas of significant growth, particularly those driven by a transition to a low-carbon economy but is very mindful of valuations. So Redwood Grove looks for interruptions or headwinds to be able to invest at valuations that are consistent with our fundamental value bias. This past year offered us that opportunity in solar, in the form of two significant regulatory challenges: first, the implementation of the Uyghur Forced Labor Protection Act, and second, an anti-dumping case submitted to the Commerce Department, which created supply uncertainty for the solar industry. As a result of understanding these challenges early, Redwood Grove was able to invest directly in long-term renewable growth companies like Array and Flex / Nextracker at what we believe to be attractive valuations.

Without negative events allowing for attractive entry points, Redwood Grove looks for unrecognized climate change-driven tailwinds or second-order participants. For example, with 44% of total petroleum refined into gasoline for cars and trucks, reducing fossil fuel use for transportation is key to reducing greenhouse gas emissions.[16] Electric vehicles (EVs) companies have market valuations that reflect strong expectations for growth over the coming years. Names like Tesla, Rivian, and Lucid have all had their moments in the sun. Even though they are looking a bit like Icarus these days, their valuations remain high. Redwood Grove's fundamental value approach with its focus on low valuations has kept us cautious about investing in such names. However, Redwood Grove has found value in second-order beneficiaries.

[12] https://rmi.org/insight/peaking-a-theory-of-rapid-transition/
[13] https://www.iea.org/news/renewable-power-s-growth-is-being-turbocharged-as-countries-seek-to-strengthen-energy-security
[14] https://www.spglobal.com/spdji/en/indices/equity/sp-500-energy-sector/#overview
[15] https://www.spglobal.com/spdji/en/indices/esg/sp-global-clean-energy-index/#overview
[16] https://www.eia.gov/energyexplained/oil-and-petroleum-products/use-of-oil.php

Looking for key suppliers to EV manufacturers we found Qualcomm. The company faces short-term challenges in its core business which supplies semiconductor modems to mobile phone companies. Their valuation seems to reflects these challenges. Depending on the multiple you use, the company's shares trade at a greater than 30% discount to the market and its peers. The reason is likely a concern over the loss of Apple's business. Apple has made clear that they are working on building an in-house modem and they are now planning to begin replacing Qualcomm modems at the end of 2024. The loss of this business could account for about 20% of Qualcomm's earnings. There have been plans to replace Qualcomm's modems in the iPhone dating back to at least 2018.[17] Back then Intel was working with Apple to develop a modem for the iPhone. Unable to meet the necessary specifications, Intel gave up and Apple bought the modem business unit. In 2021, Qualcomm themselves said they expected to make less than 20% of the modems for Apple in the 2023 iPhone (they made 100%).[18] While the timing remains a "couple of years out" Qualcomm has found other large areas of growth in IoT and the "digital chassis."

Automotive semiconductor demand is expected to grow at twice the rate as the overall semiconductor demand between 2022-2030 due to EVs replacing ICE vehicles. EVs require twice the semiconductor content.[19] Qualcomm's automotive business has developed a $30 billion pipeline in the last few years, and they believe that automotive semiconductors will have a $100 billion TAM by 2030. Besides that, Qualcomm has additional areas of growth driven by the transition to a low-carbon economy in IoT and edge computing.

Other holdings in the Redwood Grove portfolio reflect these types of growth opportunities. Intel just did a partial IPO for Mobileye which develops LIDAR, a key technology for autonomous vehicles. Flex manufactures multiple parts used in EVs and charging stations as well as components for autonomous driving systems. Despite these growth trends, Intel, Flex, and Qualcomm are all trading at a discount to their peers and the market as measured by price to earnings multiples. We believe this combination of long-term growth at attractive valuations positions the portfolio well for 2023 and beyond.

Closing thoughts

2022 was the fifth hottest year on record. It was 1.24 degrees Celsius warmer than the pre-industrial average. The past 8 years have been the 8 hottest years in recorded history. The trend line of observed data is painfully clear.[20] Climate denial is not new. Exxon Mobil has been doing it since the 1970's despite having accurate and conclusive internal forecasts.[21] Recent political

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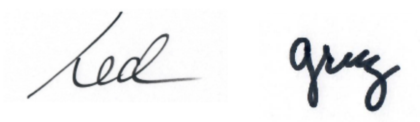
[17] https://appleinsider.com/articles/18/06/15/intels-next-iphone-cellular-modem-could-completely-replace-qualcomm-chips
[18] https://appleinsider.com/articles/21/11/16/qualcomm-predicts-it-will-supply-only-20-of-modems-for-2023-iphone
[19] https://www.mckinsey.com/industries/semiconductors/our-insights/the-semiconductor-decade-a-trillion-dollar-industry
[20] https://berkeleyearth.org/global-temperature-report-for-2022/?utm_source=newsletter&utm_medium=email&utm_campaign=newsletter_axiosgenerate&stream=top

actions to scare investors from using even basic climate analysis is only new in how the denialism is applied. While we believe it will ultimately hurt the long-term returns for pensioners in those states, we are also clear-eyed that our approach is unique. Redwood Grove believes by the time the economics of climate change are unavoidably clear, it will be too late for those denialism investors. The market will have repriced risk, leaving those pensioners holding the ball, or banks with stranded assets as is the case in Oklahoma.

At Redwood Grove our goal is to identify those climate risks and opportunities that will help generate outperformance. For the planet's sake, we hope the market follows. Thank you for your continued trust in us.

With gratitude,



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