ESG and Real Assets -
Integrating ESG in commodities

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The integration of ESG criteria in real assets is not as straightforward as in equities or bonds. The final of our three papers on integrating ESG into real assets investing takes an overview of the logic and mechanics of this within commodities, farmland, and timberland.

Get physical or get real?

Back in 2011, an influential report stated "the debate on responsible investment approaches for commodities has just begun".[1] Seven years' on … it's still just begun. That's possibly a little uncharitable, but there remains a greater lack of clarity on ESG investing in commodities than in the two other areas we have covered in this overview – infrastructure and property.

A hot investment theme at the start of the century, commodities have lost much of their allure because of their negative performance since 2011. On top of that, investing in commodities poses enormous challenges for investors who want to include ESG criteria in their investment process, as we will see below.

This hasn't been helped by the misconceptions about ESG investing and commodities, not least the ability of an investor to influence ESG factors, which depends heavily on the form of the investments.

In this report, we will look at the four main forms of commodity investments and how to integrate ESG factors:

- listed stocks and bonds
- commodity futures
- physical commodities such as precious metals, and
- farmland and timberland.

Divest or engage?

Before we dive into these challenges, we need to address the fact that commodity investments have become so fraught with emotion that good intentions have led to an overreaction.

A classic example is the common push to exclude fossil fuels and related stocks. This is, in our view, counterproductive.

For a start, their products are truly ubiquitous. We all rely on commodities in our daily lives. Burning fossil fuels is the main culprit for climate change, but crude oil is everywhere. Every bit of plastic starts life as crude oil, and even if we got rid of all the plastic in the world (even getting a 'bag for life' to last more than a couple of months would be a start), paints and dyes are often based on crude oil as well. Without crude oil we would be unable to produce modern drugs or even such mundane food supplements as vitamins. Without crude oil there would be no modern fertiliser, causing crop yields to decline dramatically, leading to an even bigger food crisis than we already have.

We cannot live without commodities, so we have to become advocates of a more efficient and sustainable use of resources. And this is where the efforts of activists to divest from energy companies and other commodities fall short. If an investor excludes these stocks and bonds from her portfolio, she has no ability to engage in discussions with company management to change its behaviour. In fact, if every ESG investor were to divest from commodity-producing companies, the management of these companies would have free reign to pollute the world and waste resources as they please.

[1] Knoepfel, I. and D. Imbert (2011), "The Responsible Investor's Guide to Commodities", OnValues.

On top of that, divesting from the stocks and bonds of commodity producers does not deprive the companies of any money. The stocks and bonds that are sold by one investor are bought by another, but no money ever ends up with the company itself, with the exception of new issues of stocks and bonds. In these cases, investors directly finance the activities of a commodity-producing company. But whether the investor wants to do that or not is again a question of engagement. An activist ESG investor certainly has more influence on the business of a commodity producer than an investor who simply shuns the company.

Also, there is no evidence that exclusion of commodity stocks or bonds by investors has any impact on the overall performance of the stocks and bonds of these companies. However, there *is* evidence that the exclusion of these companies can have a negative impact on the performance of investor portfolios.

Institutional investors, particularly pension funds, are well placed to make their voices heard, as "[large] target firms have higher institutional holdings … especially pension activist holdings. This indicates potential collaboration between SRI investors and pension activists".[2] Engagement can be beneficial to the investor, along with having positive social results.

Having said that, it is important to realise how big the impact of investors can or cannot be in practice (see Fig. 1).

Where individual investors do not themselves carry enough clout to influence boards, they can combine with others through proxy voting. Organisations such as EOS and ISS[3] offer this service.

Fig 1: ESG impact by investment type

	Ability to mitigate ESG risks	Ability to change behaviour of management	Risk of damaging the real economy	Ability to contribute to sustainable development
Commodity-related stocks and bonds	Medium/high	Medium/high	Low	Medium/high
Commodity derivatives	Low	Low	Low/medium	Low
Physical commodities	Low	Low	Medium/high	Low
Farmland and timberland	High	High	Low	High

Source: UN PRI, Fidante Partners.

[2] Wei, J. (2016). "Environmental, Social and Governance Proposals and Shareholder Activism." Australasian Finance and Banking Conference 2016.

[3] See www.issgovernance.com and www.hermes-investment.com/uki/stewardship/eos-services/

Commodity-related stocks and bonds

These are debt or equity investments in companies typically within the extractive industries or in the agricultural or fisheries value chain. Sectors such as oil and gas, mining, metals, paper and pulp represent almost a fifth of global equity markets. The risk-return profile of these investments, though, is mainly determined by their debt or equity character and is therefore not an optimal way to gain exposure to commodities for portfolio diversification.

Although they are only an imperfect substitute for a real commodity exposure, from the point of view of an ESG investor they have two distinct advantages. First, because they are common stocks or bonds, there is a plethora of information on ESG factors available from brokers and ESG consultants that makes ESG integration simple and straightforward.

Second, investments in the stocks and bonds of commodity producers provide ESG investors with the ability to change company behaviour and foster more sustainable use of resources and production of commodities (see engagement, above). Unfortunately, too many institutional investors still do not take this opportunity seriously, although it can produce significant results, both in financial and ESG terms.

A tale of two oilcos

In 2016, in reaction to the Paris Climate Accord, the world's largest energy company, Exxon, received a motion to include an annual assessment of the risks of a 2-degree climate change scenario. The company management of Exxon fought this motion tooth and nail. Not only did it recommend that shareholders reject the motion, it tried to convince the SEC to have the motion struck off the ballot altogether. The motion was finally rejected when only 38% of shareholders voted in favour.

This is a marked contrast to a similar motion for BP in 2015 requiring the company to explain its strategy and policy to deal with climate change. BP's management backed the resolution and the motion was finally accepted with 98% of the vote. What is surprising about this difference between the two companies is that 45% of the largest shareholders in Exxon who voted against the motion are also signatories of the UN Principles for Responsible Investing. Some 29% of these investors responded to member inquiries that they outsourced the voting decision to third parties – not in itself a negative, depending on whether these third parties consider ESG factors in their voting. As long as investors remain this complacent, effective change will be much harder to accomplish.

There is an increasing number of investor initiatives on ESG-related matters. Fig. 2 shows a small selection:

Fig 2: ESG impact by investment type

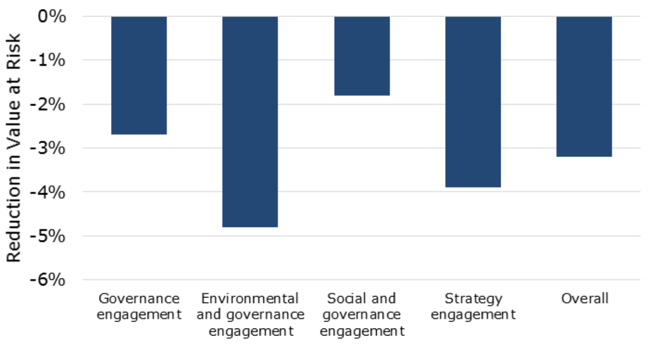
	Goal	Website
UN PRI	Fostering adoption of principles of responsible investments	https://www.unpri.org/
Global Impact Investing Network	Fostering impact investing across all asset classes	https://thegiin.org/
Climate Action 100+	Engaging with companies to reduce the effects of climate change	http://www.climateaction100.org/
ShareAction	Engaging with investors and companies to foster responsible investments	https://shareaction.org/
FAIRR	Fostering animal welfare in the food industry	http://www.fairr.org/
Open forests	Fostering sustainable forestry	https://openforests.com/

Source: Fidante Partners.

Most importantly, the empirical evidence points towards a beneficial effect of investor engagement on stock performance. A collaboration of researchers from Ireland, the UK, Germany, and the US examined the engagement activities of a large institutional asset manager in the UK who is highly active in the ESG space. The study examined 682 engagements across 296 firms from 2005 to 2014. Fig. 3 shows the main result. Engagement with company management reduces downside risks. On average, when the investor engaged with company management on ESG-related risks the Value at Risk (VaR) of the share declined by about one fifth. Our chart shows the average decline in Value at Risk by type of ESG risk factor.[4]

While the study found that 28% of investor engagements were successfully completed – a not insignificant proportion – more broadly, firms with better ESG performance are less vulnerable to company-specific negative events, with engagement "most effective in lowering downside risk when addressing governance or strategy topics and when changes in firms' environmental policies (especially on climate risk) are coupled with governance improvements".[5]

Fig 3: Reduction in downside risks from investor engagement



Source: Hoepner et al. (2018), Fidante Partners. Past performance is not a reliable indicator of future results.

[4] Hoepner, A. G. F., I. Oikonomou, Z. Sautner, L. T. Starks, and X. Zhou (2018). "ESG Shareholder Engagement and Downside Risk." AFA 2018.

[5] Hoepner et al. (2018).

A separate study of 744 ESG engagements with 310 firms between 1995 and 2015 showed that only a small fraction of ESG proposals are ever accepted at company general meetings. Out of the 744 shareholder proposals investigated, only 360 were ever voted on and only ten proposals were accepted. However, those proposals that were accepted led to significantly higher corporate profitability in the two years after the adoption of the ESG measures and a monthly outperformance of 0.4% (4.8% per year) compared to companies with similar characteristics that have not engaged in ESG enhancing activities.[6] Successful ESG engagement seems to be beneficial for both the company and shareholders.

Because investor activism is the main driver in changing behaviour, ESG integration in listed commodity stocks or bonds should:

- integrate ESG research into investment analysis and decision-making processes
- encourage research analysts to investigate material ESG issues and their impact on company performance.
- select external asset managers based on their ability to integrate ESG factors in their investment process and engage with company management.
- exercise their voting rights and engage with company management on ESG issues, either directly or outsourcing to specialist engagement service providers.
- support investor initiatives and industry associations that actively try to change the behaviour of commodity-producing companies.

Commodity derivatives

The most common way to get exposure to commodities is through commodity futures, although other ways, such as swaps, commodity hedge funds or index tracking funds such as ETFs, are also possible.

The risk here is that speculative activity in commodity futures markets can lead to increased price volatility. Highly liquid ETFs may exacerbate this by making it easy for momentum-driven investors to move large amounts of money in or out of commodity markets – that infamous 'hot money'. Such investors generally trade "based on factors that are unrelated to fundamentals, such as herding around a price trend (which might initially be justified by changes in fundamentals but then becomes self-reinforcing) or wanting a certain exposure for portfolio diversification reasons".[7]

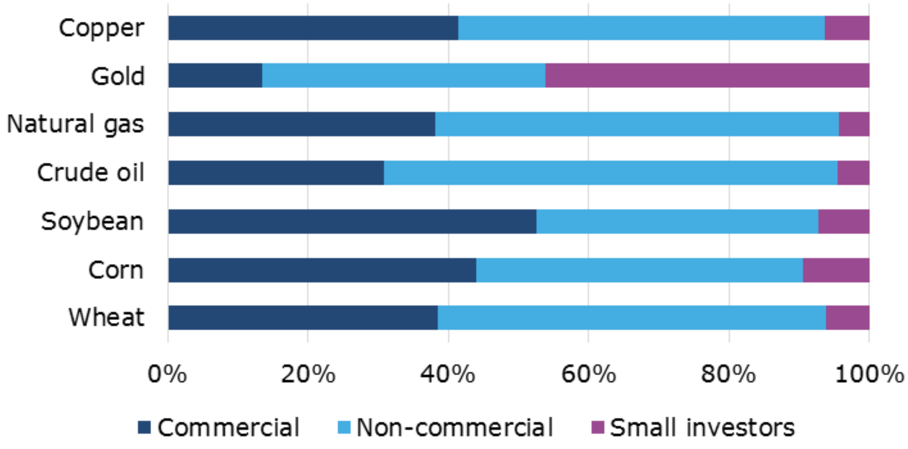
It has been argued that higher volatility causes higher physical commodity prices – volatility in futures markets leads to increased margin requirements, making it costlier to hedge production risks. While there is no conclusive evidence that speculative activities lead to distortions in the level of the price, at the very least increased volatility can make it difficult for users of commodities to plan input costs.

Fig. 4 shows a current snapshot of the market share of commercial investors (such as producers and end users of commodities), non-commercial investors (such as hedge funds, index funds, and institutional investors), and small retail investors. Depending on the commodity, the influence of speculative investors can vary dramatically, but in most instances it fluctuates around 60% of the open futures contracts. This may seem like a lot, but for liquid futures markets like the ones shown here, this typically is not a market share that leads to price distortions but rather a level that is commensurate with a better price discovery and increased liquidity.

[6] Wei, J. (2016). "Environmental, Social and Governance Proposals and Shareholder Activism". Australasian Finance and Banking Conference 2016.

[7] Knoepfel, I. and D. Imbert (2011).

Fig 4: Market share in US commodity futures markets



Source: Bloomberg, Fidante Partners.

Most importantly, higher volatility of the prices for food commodities can cause great harm for governments and citizens of the poorest countries of the world. More than 50 of the world's poorest economies are almost 100% reliant on agriculture. Increased volatility in food prices reduces the ability of these countries to import enough food for their citizens and the ability of local farmers to earn a living with agricultural produce.[8]

There's also a negative portfolio effect: by piling into commodities markets at such scale, and being largely insensitive to fundamental drivers, investors undermine the low correlations of commodities to other asset classes.

These risks lead to the following potential action points for investors when investing in commodity futures, index funds or commodity hedge funds:

- do not take physical delivery of commodities, as this may cause a shortage of commodities in the physical market and may distort prices.
- avoid less liquid markets, where the risk of causing excess volatility is highest.
- insist that hedge fund managers disclose their positions and strategies.
- do not invest in hedge funds that run pure momentum strategies or similar strategies that may enhance price volatility.
- use multiple investment channels, so that single investment managers or funds don't dominate a market.
- implement procedures in passive investments to rebalance portfolios when prices exceed levels justified by fundamentals.
- set limits on investment in smaller, more illiquid commodity markets where single large investors could have a big impact on prices.

[8] Knoepfel, I. and D. Imbert (2011).

Physical commodities

While traditionally these were limited to gold and other precious metals, physically backed ETFs and structured products are making it easier to invest in industrial metals such as copper, tin, zinc, aluminium and lead, as well as gemstones.

Where stocks and bonds lead to taking up issues such as working conditions or environmental impact with the companies invested, physical commodities (along with their derivatives, above) demand consideration of their ‘systemic’ impact: “physical commodities taken away from productive use can harm growth and returns in other asset classes and their production leads to environmental and social externalities; excessive speculation in commodity derivatives can lead to price volatility and ultimately harm investors’ ‘license to invest’ in those markets”.[9]

From an ESG perspective, physical commodity investments raise three important questions:

1. **Sourcing**: Investors need to be able to trace the origin of physical commodities in order to avoid sourcing commodities which have been mined violating human rights or labour standards (for example, blood diamonds). Tracing the origin of commodities is hard because gold mined in conflict zones can be melted down and mixed with gold from other sources: “A real asset investor can select farm investments on the basis of their water and greenhouse gas footprint and a shareholder can challenge the sourcing policy of a listed food company, but the holder of gold bullion cannot know whether it was mined by slave labour or by a professional mining company. The fungibility of physical commodities limits the extent to which investors can identify and manage ESG issues associated with their production”.[10] There is a proliferation of false certificates of origin for gemstones, which further muddies the waters.
2. **Hoarding**: Does it make sense to hoard commodities for unproductive uses in a safe and thus reducing the amount of a commodity that is available for productive uses? For precious metals such as gold, the competition with productive uses is minimal so this is less of an issue, but for industrial metals a widespread adoption of physical commodity investments can become problematic. Competition for supplies in already tight markets can have a negative impact on growth. Many investors have “pointed to this potential ‘zero-sum game’ as the reason for having introduced policies not to invest in physical commodities.”[11]
3. **Money laundering**: Precious metals and gemstones circulate outside the regulated and controlled banking system and thus lend themselves to money laundering activities. Investors need to be able to source the origin of precious metals and gemstones not only in terms of its production origins but also in terms of its previous ownership.

ESG investors should therefore avoid physical investments in commodities that are of industrial use (industrial metals, industrial diamonds). Similarly, investors should focus on improving the supply chain of physical commodities to focus more on ESG issues (for example, improving environmental and work conditions in mines). This is often much easier done through investments in the equities of mining companies rather than investments in their physical output.

Given these issues, we think that it is generally not advisable for ESG investors to invest in physical commodities, with the possible exception of gold.

[9] Knoepfel, I. and D. Imbert (2011).
[10] Knoepfel, I. and D. Imbert (2011).
[11] Knoepfel, I. and D. Imbert (2011).

Farmland and timberland

The strains on this area are painfully apparent. By 2050, the world will need to produce 70% more food to satisfy global demand, according to the UN. Even now, about one-third of the world is chronically underfed or undernourished. The structural defects in the world food system stem from decades of underinvestment, with the UN's Food & Agricultural Organisation estimating that an additional $83bn of annual investment into agriculture will be needed to support the anticipated global population of nine billion in 2050. In four major supply chains – beef, soy, palm oil, and pulp & paper – commodities are increasingly sourced from tropical rain forest countries, and from regions with high deforestation risk.

Unless recognised and addressed, such assets carry considerable downside for their investors: "The risks facing companies are not just theoretical. In 2017, 87% of companies … identified at least one inherent risk related to producing, marketing or sourcing of soft commodities with the potential to generate a substantive change to their business operations, revenue or expenditure".[12]

To make a positive from all these negatives, the opportunities for improvement are considerable – and concrete: "There are real opportunities here to direct capital toward financially and socially productive uses, but investors must educate themselves about the dynamics of the world agricultural system to ensure that their actions make a positive contribution to meeting long-term global objectives".[13] The advantages of sustainable production include better productivity per hectare – significantly raising overall profitability – reduced input costs and improved worker productivity.[14]

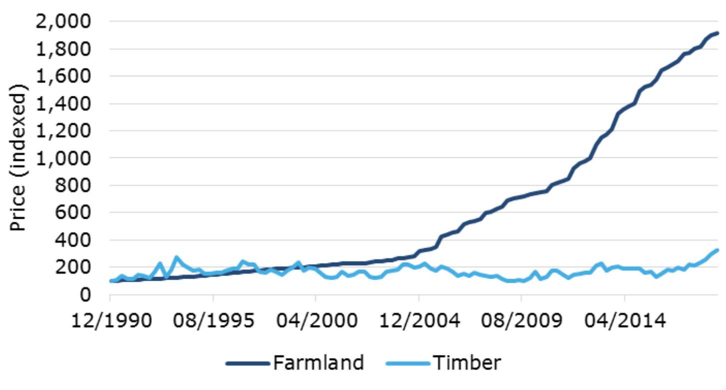
This is a particularly attractive area for institutional investors. The benefit of investments in farmland or timberland is that land prices have been increasing steadily and in the long run provide some inflation protection as well as low correlation with existing asset classes.

What's more, institutional investors can be good owners: "Institutional investment … can lead to a more efficient use of the land. These investors have a long-term interest in farming the land and investing in infrastructure to maximise cash flows and sell their food on the open market".[15]

Another positive is that there is a great deal more penetration of sustainable standards in forestry and agriculture than other commodity investment areas.

On top of that, the sale of agricultural crops or timber creates additional income from productive use of the land. While agricultural commodity prices have tended to decline over time, timber prices in the US have tripled since 1990 (see Fig. 5).

Fig 5: Prices for farmland and timber



Source: Bloomberg, Fidante Partners. Past performance is not a reliable indicator of future results.

[12] Hoepner et al. (2018).
[13] Knoepfel, I. and D. Imbert (2011).
[14] "The Role of the Financial Sector in Deforestation-Free Supply Chains." Tropical Forest Alliance 2020, 2017.
[15] Knoepfel, I. and D. Imbert (2011).

The increasing importance of sustainably-sourced timber as a building material, along with its usefulness in carbon capture, is a likely on-going price support, even if it doesn't continue this trajectory. The price of the stuff that sticks are made of is unlikely to come down like a stick.

Compared to all the other commodity investments discussed so far, farmland and timberland investments have several distinctive advantages:

- their productive use generates additional supply, thus actively alleviating the risk of supply shortages that would hurt the most vulnerable countries in the world.
- capital from investors is used to modernise the agricultural sector in developing nations after years of neglect due to a lack of investments.
- investors can directly influence ESG risk factors because they – or the third-party managers they hire – control the working conditions and means of production.

On the other hand, there are also challenges that investors need to be aware of:

- some asset managers do not put farm- and timberland to productive use but instead invest in land that can be converted for other uses (for example residential housing). These investments should be avoided.
- working farms should only plant crops that are suitable for the region and climate. Planting water-intense crops in a hot and dry climate, for example, can lead to a significant waste of scarce water resources.
- monitoring and enforcing ESG standards can be challenging because farms are often far away from the location of investors and in countries where labour laws, environmental laws are not enforced by the authorities. This puts the onus on them and their managers – an additional cost but a necessary one if the investments are to be ESG-compliant.

In order to ensure that these issues are dealt with in a sustainable fashion, investors need to verify whether deforestation risks are accounted for during the supplier selection process; if companies enforce procurement standards that impact commodity sourcing; if they use third party certification as a way to make their business practices more sustainable; and what processes are in place to monitor supplier compliance with the company policy. Also, what is the process if suppliers are found not to be compliant?[16] There are, of course, many other questions, depending on the particular nature of the investment.

To further address this, investors in real assets should, before a transaction takes place:

- require investment managers to conduct an environmental impact assessment.
- require that investment managers identify relevant labour and human rights risks and impacts of a planned investment.
- consult with local communities to identify risks and problem areas. Continue communications with communities throughout the life of the investment.

On an ongoing basis, they need to:

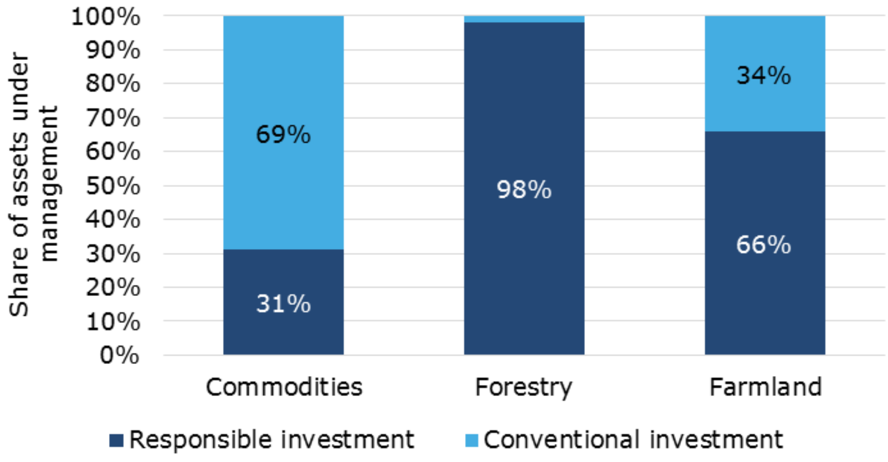
- require compliance with local and international laws, even where poorly-enforced.
- stimulate the development of improved operational ESG standards for various asset types.
- regularly monitor and report on the ESG performance of the investments.
- avoid investments in land conversion – for example, turning forestland into pasture or fields.

We're aware there's a certain danger of 'death by bullet-point' with the above, but this is an area that demands specific attention, and where investors can have significant positive impact if they manage these specifics.

Because investors can have a much bigger influence on ESG factors in farmland and timberland investments, responsible investments have now become the standard in this asset class (see Fig. 6).

[16] Financial Institution Guidance: Soft Commodity Company Strategy.

Fig 6: Responsible investment activities in commodities



Source: UN PRI, Fidante Partners.

ESG integration step by step

Direct or indirect ownership determines how investors influence ESG outcomes: a direct investor controls the transaction and operation of an asset, while an indirect investor deals only with their asset manager – a situation all but the largest institutional investors will likely find themselves in. Nevertheless, their influence can be considerable, whether it be in determining the investment mandate or the integration of ESG factors into the ongoing monitoring of the portfolio. Either way, this necessitates the development and implementation of an ESG strategy. Asset owners can define an ESG strategy for commodity investments in five steps:

1. Develop an ESG strategy:
   - Define a policy how ESG criteria are reflected in asset acquisition, management and operation.
   - Define KPIs to measure progress and evaluate new investment opportunities.
   - Define reporting standards and frequencies.
   - Insist on full transparency in the holdings of commodity futures by external asset managers.
   - Define limitations for investments in food commodities or refrain from investing in these markets altogether.
   - Set targets for investor engagement with commodity producers.
2. Implement an ESG strategy:
   - Implement an active ownership approach by reviewing existing external managers and passive mandates.
   - Engage with external asset managers to improve their ESG compliance and divest from non-compliant and reluctant managers.
   - Require external managers to actively engage with their underlying investments in commodity producers to reduce ESG risks.
   - Enforce comprehensive reporting by external managers on ESG procedures and engagement activities.
3. Align interests:
   - Mandates for external asset managers should contain clear guidance and requirements on ESG integration.
   - Set quantitative targets for ESG compliance and shareholder engagement. Reward these targets with additional assets or bonus payments.
4. Reporting:
   - Define clear reporting standards that include ESG criteria and voting engagement.
5. Influence:
   - Be an outspoken advocate for ESG integration. Support industry initiatives and research as well as public policy initiatives.

Summary

For ESG-cognisant investors in commodities, real assets or stocks and bonds provide the best routes to actively manage ESG risks and opportunities. Physical and derivatives investments, while offering certain opportunities, are more limited, carrying the risk of negative systemic effects

Holding physical commodities offers good diversification benefits. However, with the exception of gold – which itself carries problems of traceability – ESG strategies are difficult to execute. While commodity derivatives, are the most frequently used investment type, "it is not easy to apply the concept of responsible investing and in this sense the alignment is not ideal".[17]

Overall, investors have still to properly explore the potential of ESG investing in commodities and, certainly when it comes the likes of stocks, bonds, farmland and forestry, the potential is not only real but very much needed.

[17] Knoepfel, I. and D. Imbert (2011).

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