PZENA Investment Management

SECOND QUARTER 2021 FINDING VALUE IN ESG Using carbon pricing as a research input is an illustration of our integrated approach to evaluating ESG considerations in our normal investment due diligence process.

The integrated energy sector was recently rocked by shareholder and judicial activism that would put these global businesses on an accelerated path to decarbonization. Whether it be new board members appointed by an activist hedge fund (ExxonMobil), or an adverse court ruling that would accelerate the pace to zero carbon (Royal Dutch Shell), these events reinforced the need to assess the sustainability of any business that is either a producer or a consumer of fossil fuels. (You can find our update on ExxonMobil and Royal Dutch Shell in the Global Research Review on page 6.)

We believe the optimal way to think about this issue is an integrated approach that incorporates material ESG considerations into the normal investment due diligence process. Integrating carbon pricing into the analysis is one way investors can financialize an element of climate transition risk for businesses that consume material amounts of fossil fuels. It helps us estimate the impact on long-term earnings power and the potential return on future capital investments.

Somewhat counter-intuitively, a carbon price is more helpful in financializing climate transition risk for the consumers of fossil fuels (i.e., utilities) as opposed the oil & gas majors. This is because carbon prices are thus far only applied to scope 1 (direct operations) and scope 2 (indirect through purchased electricity, steam, heat or cooling) emissions, which are relatively immaterial for an oil & gas major compared to the scope 3 emissions from the use of their products. For a utility, on the other hand, scope 1 and 2 emissions can be highly material depending on whether they use fossil fuels for electricity generation.

THE HISTORY OF CARBON PRICING

The concept of carbon pricing was developed to help producers and consumers know the financial impact their business has on society and therefore make optimal investment decisions. In its simplest form, the carbon price is supposed to be the market's estimate of the negative impact that a ton of carbon has on the environment. If that price were factored into decision making, companies would be able to consider the cost of emitting a ton of carbon into the environment and factor that cost into decisions about alternatives or mitigation. Proponents of a carbon price argue that it helps shift the burden of emissions reduction back to the parties responsible for the carbon emitted, and those who are therefore in the best position to reduce the emissions.

Despite the widely acknowledged benefits of carbon pricing theory, the application of pricing frameworks has varied by region and industry. For example, the EU has a longstanding EmissionsTrading Scheme (ETS) dating back to 2005 that covers emissions from power generation, industry, and intra-EU aviation, roughly 45% of the block's total emissions.

A surplus of EU emissions allowances in the early/ mid 2010s led the price of carbon to fall under €10/ tonne for an extended period until 2018, when the European Commission (EC) activated the Market Stability Reserve to remove excess permits from the market entirely. This pushed the cost of carbon above €20/tonne, where it has mostly remained. It's currently trading at an all-time high level of over €50/tonne. There is some debate as to the likelihood that the price remains this high for any length of time. There is, however, an increasing market consensus that the carbon price must reach, and remain at or above, €100/tonne to meet the goals of the Paris Agreement; still a long way from the average price in even the more established European ETS. That said, the evolution of carbon pricing frameworks will likely play an increasingly material role in company financials moving forward.

While we don't know precisely what the carbon price will be in the future, we can estimate the effect of different carbon prices on each company we analyze. Thus, we can determine whether an investment has an attractive expected return over a range of carbon price outcomes.

CASE STUDY: CEZ

Utilities operating within the EU are required to buy permits for the carbon emitted in the generation of electricity from the Emissions Trading Scheme mentioned above. Because all utilities are subject

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to this framework, the price of carbon applies to the marginal electricity producer and thus has a considerable influence on the wholesale price of electricity. CEZ, a Czech utility majority-owned by the state, is subject to this carbon price, but owing to its significant generation of nuclear and hydroelectric power, its carbon intensity is lower than the average European generator, and materially lower than the marginal generator. Thus, all things being equal, the company benefits from higher earnings when higher carbon prices drive up the price of electricity.

We researched CEZ in the fall of 2017 when carbon prices languished below €10/tonne and German power prices were around €35/MWh. At the time, we researched the working of the Carbon Market Stability Reserve and determined that the EC was likely to act to drive up the carbon price by removing excess permits from the market. We believed the intent of such actions was to drive coal out of the generation fleet to be replaced by natural gas, which has fewer carbon emissions per MWh of electricity generated. As such, we ran a scenario using the coal to gas switching price of carbon, at around €25/tonne, as our normalized carbon price. In this scenario, the power price would rise to around €45/MWh which would drive a 65% rise in normalized earnings vs. 2016 EPS. On that basis, the stock was attractively valued based on our estimate of normalized earnings, which helped drive our decision to establish a position in the company.

CONCLUSION

ESG issue assessments help us make more informed investment decisions. This framework for thinking about carbon pricing is one way to help financialize climate transition risk for companies where this is a material investment issue, further informing our decision to invest, or not. This body of work relies on a constantly evolving set of assumptions that will be revisited as regulatory and market shifts occur. A focus on carbon pricing is critical given renewed regulatory attention on this mechanism as one of the policy levers to meet the goals of the Paris Agreement and achieve Net Zero by 2050.

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CEZ, A.S. was held in our Emerging Markets Focused Value, European Focused Value, and other strategies during the second quarter of 2021.

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