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The other sort of liquidity

Water has become an increasingly important factor for performance across sectors, sub-sectors and companies.

- _ From a sector perspective, energy and materials pose some of the highest water-based risks.
- _ We see comparatively lower water risks in the financial, healthcare and communication services sub-sectors, as well as among some industrial companies, such as transport.
- _ The integration of environmental, social, and corporate governance (ESG) criteria helps us identify potential investment opportunities and risks.

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This article outlines how we think about water risks within an investment framework at DWS. Our new water-risk rating has now been integrated into our climate-and-transition-risk rating. First, though, a few words about water risks, and how and why we believe they are relevant for asset management.

Our fiduciary role is to take care of our clients' capital, to deploy it and aim to ensure sustainable returns. Water matters. Already, 25% of world economic growth is from countries facing chronic water shortages. That share is likely to rise in the coming decades. Water resources, in particular fresh water, barely represents 2.5% of all the world's water. A little under 1% is available to sustain all terrestrial life and ecosystems. To make matters worse, pollution, the loss of natural wetlands and the increasing likelihood of droughts coupled with drastic climate change are adding further strains on the availability and quality of water resources. Moreover, population growth, climate change and our inability to redress the damage created by past action have the potential to make a bad situation even worse.[1]

For example, the United Nations (UN) explains in detail how water may affect climate change in its comprehensive report, "Water and Climate Change."[2] According to these researchers, climate change will probably result in more extreme events such as heavier precipitation, extreme heat and prolonged droughts. By contrast, there remains significant uncertainty in identifying a clear direction about annual precipitation totals and seasonal patterns.

No wonder then, that various groups such as the World Bank and the World Economic Forum see water as a key systemic risk facing our planet.[3] Over the past two decades, a significant body of research has taken place to understand water risks, but progress on addressing them has been slow. These failures probably reflect (i) the fragmented nature of water regulation, (ii) the characteristics of water investments, and (iii) the misplaced belief of many decision-makers that water is plentiful and cheap.

So, what does all this mean at a practical level for asset management? One area of focus is on existing water-related infrastructure. Climate change and rising sea levels generate additional risks with most of the world population living in coastal areas. As a result, there is likely to be a growing need for adaptation measures by both the public and the private sector. Key concerns range from higher levels of erosion and

[1] FAO Water: A finite resource (1995) http://www.fao.org/3/u8480e/U8480E0c.htm
[2] https://www.unwater.org/publications/world-water-development-report-2020/
[2] See esp. World Bank (August 2019). Quality Unknown - The Invisible Water Crisis https://openknowledge.worldbank.org/handle/10986/32245

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the contamination of water-courses, to the creation of temporary ponds that can foster the growth of mosquito larvae which are vectors for diseases. New infrastructure may also be needed to reduce risks associated with extreme weather events. Without mitigation measures, water stress as a result of extreme events could put a stop to manufacturing and energy generation and even endanger food availability.

Based on this, we have identified a range of investment approaches. These include risk-control approaches that offer the potential to minimize exposure to companies and sectors with high water risks, but also looking at the topic from a thematic angle. Positive approaches seek to identify companies that drive innovation for the management of water risk or generate other positive changes in mitigating water risks. Finally, our traditional engagement and stewardship approach uses investor influence with companies to focus on real-world changes and/or improving financial risk management and disclosure.

We believe that tilting a portfolio away from companies with high carbon emissions or high water use/pollution can reduce financial risk as the profitability of such companies may be negatively impacted in the future. Risks to such companies include regulatory changes, carbon or water pricing, faster expansion of renewable technologies or changing market perceptions. However, divestments do not necessarily affect carbon emissions, water use/pollution, nor boost real-world resilience to physical climate impacts. In principle, differences in priorities may exist for fixed-income and equity investors, but both tend to have similar views on the importance of corporations strengthening their sustainability policies and actions.

In our analysis, we look at the impact of water risk in the different sub-sectors to address water risks and opportunities in the sector-allocation and portfolio-construction process. For each investment, we systematically ask: "Is the company materially exposed to water risk? How well can the company deal with this risk?" To do so, DWS has developed its own proprietary water-risk methodology. For company-level inputs, we subscribe to the four important ESG data providers, namely Trucost, MSCI, ISS-ESG and Arabesque, aiming to ensure a high reliability and objectivity of the final water-risk assessment.

How water risk may affect financial performance in practice is at the heart of this mapping exercise. Our analyses show that some of the highest- and excessive-water-risk companies are typically found in the energy, materials, food and beverages sectors as well as among independent power producers in the utility sector. For example, within materials, the need for key inputs such as water and energy in the mining sector is likely to physically and financially constrain the establishment of new operations. Companies with limited water risk are typically in the financial, healthcare, communication-services and some parts of the industrial sectors, such as transportation.

Aside from identifying high levels of water risk, we have also been able to identify the sectors, sub-sectors and individual securities where exposure to water has the potential to provide the most opportunities. We found that such opportunities tend to be most concentrated in industrial gases, home-improvement retail, building products, specialty chemicals and renewables.

All told, we have found that investors are increasingly integrating ESG information into their investment decisions. This may have supported the performance of different sectors and sub-sectors during the first ten months of 2020. More importantly, it illustrates the usefulness of a formal framework when evaluating issuers against a consistent set of criteria in deriving a global outlook for a sector allocation.

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GLOSSARY

Investors increasingly take environmental, social and governance (ESG) criteria into account when analyzing companies in order to identify non-financial risks and opportunities.

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