

Theme of the Month: Water: a scarce resource



Key Messages

1. **Ever greater demand** is combining with increasingly uneven and unreliable supply to make water one of the world's most precious resources.
2. **Water-related conflicts** are rising on a global scale. Water therefore is a vital part of our "Food Security" Investment Theme for 2022.
3. **Infrastructure**: huge investments are necessary to build and maintain a more efficient and sustainable infrastructure.
4. **Efficiency**: the use of water needs to become more efficient, especially in areas such as agriculture.
5. **Invest in this theme via dedicated funds and ETFs**, either with a broad approach or a focus on a dedicated area of the theme.

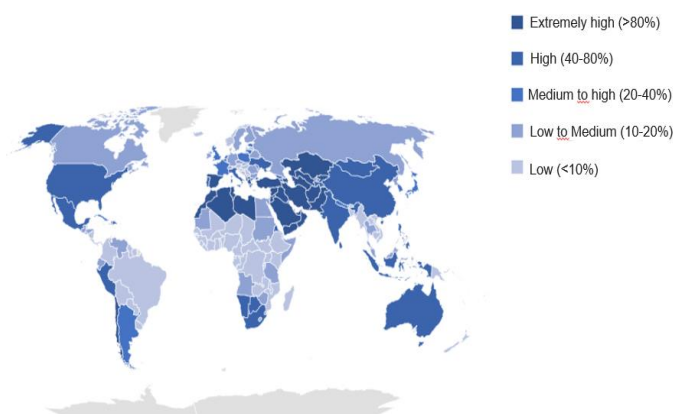
Since we call Earth the blue planet, one may think that water is plentifully available. Unfortunately this is only theoretically true. Today 97.5% of the world's water is salty water that cannot be used for drinking or farming. Only the remaining 2.5% is suitable for human consumption. However, most of the reservoirs can be found in glaciers or the Earth's poles and are thus not accessible either. In fact, only 0.3% of all water on earth is useable fresh water.

Population growth and economic development are driving a sharp rise in water demand. Beyond drinking, water is a fundamental input for growing food and economic productivity in general. Increasing global wealth is changing the patterns of water consumption. Hundreds of millions more people expect to enjoy regular showers and eat more water-intensive food.

Growing swathes of the global population want to wear clothes whose fabrics require large amounts of water for their creation, and to use electricity whose generation depends on water for cooling. On the supply side, climate change and shifting weather patterns are making the distribution of rain less predictable, as evidenced by the rising number of both devastating floods and droughts worldwide.

In fact, access to clean water is becoming a dire global challenge. This and other sustainable development issues are faced by all countries. They have therefore been explicitly included in two of the UN's Sustainable Development Goals (SDGs). Goal 6 concerns the access to water, while Goal 12 relates to the transition towards a circular economy.

WATER STRESS INDEX



Source: World Resources Institute, BNP Paribas

Stephan Kemper

Investment Strategist
BNP Paribas Wealth Management, Germany



BNP PARIBAS
WEALTH MANAGEMENT

The bank
for a changing
world

Water stress on the rise

Food security without water is impossible

Water is a crucial resource when it comes to securing the ability of producing food and feeding populations. Via the food security channel, we therefore consider water security as a vital part of our broader security-related investment theme.

Today several regions in EMEA and Asia are facing high to extremely high risks of groundwater shortages, as a study from the think tank World Resource Institute shows. On a global scale, 771 million people lack basic drinking water services. Needless to say, this has severe consequences. The shrinking availability of water despite the rising demand is an increasing cause for conflict across the globe. Based on numbers from the Pacific Institute the amount of conflicts tripled between 1999-2008 and 2009-2019. Although not all of these conflicts result in military clashes, the death toll is rising. Only last year, at least 41 people were killed and more than 200 injured in a violent border conflict over access to water resources in the region between the two ex-Soviet republics of Tajikistan and Kyrgyzstan.

Water stress (measured as the ratio of withdrawals to supply) is projected to grow globally until 2040. In certain areas it is even expected to climb to extremely high levels of 80% or more. By 2050, total water usage is set to increase by 15% above today's levels to serve approximately 9 billion people in the world. Thus, the potential for conflicts is on the rise too. In order to tackle these challenges, immediate action is necessary.

Addressing these issues will require significant capital investments in new technologies and services, in addition to greater policy support from regulators and governments. Primarily, appropriate infrastructure needs to be built and maintained. According to the American Society of Civil Engineers, the US water infrastructure only scores a C- as water loss is a universal problem for US water utility companies. The average water loss is estimated at 16% with individual system water loss rates even exceeding 30%. An estimated cumulative investment of more than USD 1,000 bn is required to upgrade the US water system to a sustainable level and then to maintain it. The situation in Europe is even worse. The mean value for water distribution losses in the European pipe system stands at 23%.

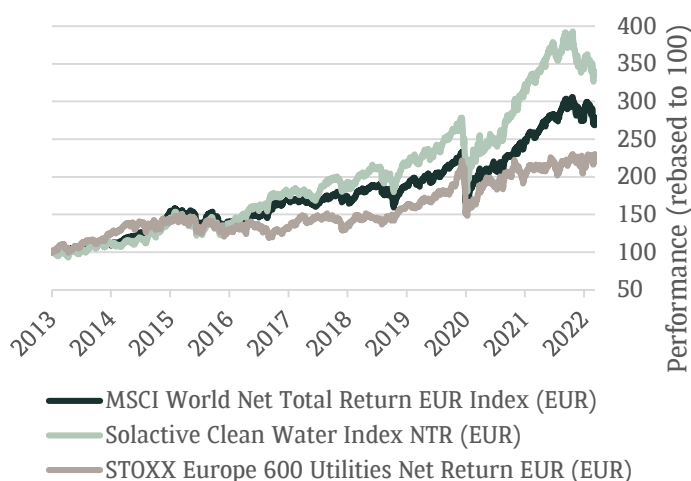
The usage of water needs to be improved as well. Agricultural activities account for an estimated 70% of the yearly global water consumption and thus provide the highest leverage for improvements. The range of possibilities is broad. More effective forms of farming, such as vertical farming, can reduce water usage by 50% for a given level of output. In traditional farming, improved watering via smart irrigation systems is another way to conserve water. Another approach could be to replace water-intensive food such as meat with alternative sources of protein. This market alone is projected to reach global revenues of up to USD 72bn by 2025.

Water: a defensive approach to ESG investing

Towards low volatility and higher dividends

From a portfolio perspective, investing in the water theme can provide investors with certain advantages. Compared with more growth-oriented and thus more volatile ESG themes, such as energy transition, water offers a low volatility approach, that also includes certain characteristics of the value factor. Most water-related indices include a high degree of utility companies, which often offer attractive dividend yields and are less influenced by the economic cycle. Thus, the theme offers an investment opportunity which combines favourable factors in times of uncertainty. These characteristics has helped the theme to deliver an outperformance of ca 70% during the last decade. Water could be used to gain a more defensive exposure to the ESG investment theme.

WATER OUTPERFORMED THE BROADER MARKET DURING THE LAST DECADE



Source: BNP Paribas, Bloomberg



BNP PARIBAS
WEALTH MANAGEMENT

The bank
for a changing
world

CONNECT WITH US



wealthmanagement.bnpparibas

DISCLAIMER

This marketing document is communicated by the Wealth Management Métier of BNP Paribas, a French Société Anonyme, Head Office 16 boulevard des Italiens, 75009 Paris, France, registered under number 662 042 449 RCS Paris, registered in France as a bank with the French Autorité de Contrôle Prudentiel et de résolution (ACPR) and regulated by the French Autorité des Marchés Financiers (AMF). As marketing material, it has not been prepared in accordance with legal and regulatory requirements aimed at ensuring the independence of investment research and is not subject to any prohibition on dealing ahead of its dissemination. It has not been submitted to the AMF or any other market authority.

This document is confidential and intended solely for the use of BNP Paribas SA, BNP Paribas Wealth Management SA or their affiliates ("BNP Paribas") and the persons to whom this document has been delivered. It may not be distributed, published, reproduced or disclosed by any recipient to any other person, nor may it be quoted or referred to in any document, without the prior consent of BNP Paribas.

This document is provided solely for information and shall not constitute an offer or solicitation in any state or jurisdiction in which such an offer or solicitation is not authorized, or to any person to whom it is unlawful to make such offer, solicitation or sale. It is not, and under no circumstances is it to be construed as, a prospectus.

Although the information provided herein may have been obtained from published or unpublished sources considered to be reliable and while all reasonable care has been taken in the preparation of this document, BNP Paribas does not make any representation or warranty, express or implied, as to its accuracy or completeness and does not accept responsibility for any inaccuracy, error or omission. BNP Paribas gives no warranty, guarantee or representation as to the expected or projected success, profitability, return, performance, result, effect, consequence or benefit (either legal, regulatory, tax, financial, accounting or otherwise) of any product or transaction. Investors should not place undue reliance on any theoretical historical information regarding such theoretical historical performance. This document may contain or refer to past performance; past performance is no guarantee for future performance.

The information contained in this document has been drafted without prior knowledge of your personal circumstances, including your financial position, risk profile and investment objectives.

Prior to entering into a transaction each investor should fully understand the financial risks, including any market risk associated with the issuer, the merits and the suitability of investing in any product and consult with his or her own legal, tax, financial and accounting advisors before making his or her investment. Investors should be in a position to fully understand the features of the transaction and, in the absence of any provision to the contrary, be financially able to bear a loss of their investment and willing to accept such risk. Investors should always keep in mind that the value of investments and any income from them may go down as well as up and that past performance should not be seen as an indication of future performance. Any investment in a product described herein is subject to the prior reading and understanding of the legal documentation concerning the product, and in particular the one which describes in details the rights and obligations of investors as well as the risks inherent to an investment in the product. Save as otherwise expressly agreed in writing, BNP Paribas is not acting as financial adviser or fiduciary of the investor in any transaction. The information, opinions and projections expressed herein reflect the opinion of their author at the time of writing; they are not to be relied upon as authoritative or taken in substitution for the exercise of judgment by anyone, and are subject to change without notice. Neither BNP Paribas nor any BNP Paribas Group entity accepts any liability whatsoever for any consequences that may arise from the use of information, opinions or projections contained herein.

As distributor of the products described herein, BNP Paribas may receive distribution fees on which you can obtain more information upon specific request. BNP Paribas, their employees or administrators may hold positions in these products or have dealings with their issuers.

By accepting this document, you agree to be bound by the foregoing limitations.

© BNP Paribas (2022). All rights reserved.

Pictures from Getty Images.



BNP PARIBAS
WEALTH MANAGEMENT

**The bank
for a changing
world**