Keeping up with Climate Change

Amundi ASSET MANAGEMENT 東方匯理 資產管理

Integrating key climate change mitigation into Amundi's Capital Market Assumptions and asset allocation process.

Climate change is arguably the most critical long-term challenge faced by humanity. It is also a key element for investors to factor in when building long-term economic and market assumptions. The changes driven by the energy transition will require a complete rethinking of asset class returns forecasting and have ramifications for investors both now and in the years to come.

The rebalancing of energy sources across the globe will drive the transition towards a greener economy. But this process will not be linear and we will see increasing divergences across regions and countries depending on the starting position and the policies adopted. Exposure to physical risks, such as extreme weather events or gradual changes in climate, and transition risks stemming from climate policy adoption, changes in consumer preferences or technology evolution will also affect countries with varying degrees of severity.

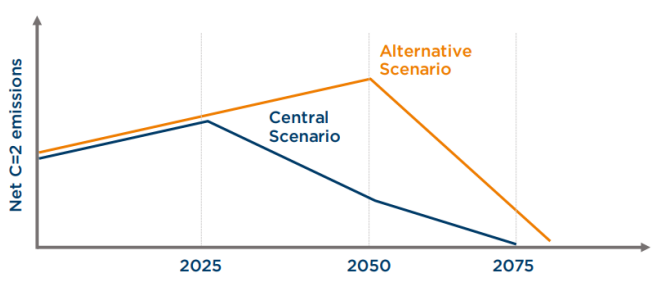
Monetary and fiscal policies will need to tackle these risks, as their initial impact on the economic outlook (through business disruption, higher commodity prices, migration, amongst others) could transfer to the markets where they could generate a perverse feedback loop through market losses and credit defaults which would damage economic outlook even further.

Changing the way we think about forecasting

With this in mind, we have developed a new climate-aware "Central Scenario" base case with a 30-year horizon. In this scenario we expect climate policies to be slowly introduced from 2025, but that this will proceed in a muddled fashion, incorporating some risk of delays. Under such a scenario, the energy transition improvements will not be sufficient to meet the 1.5°C above pre-industrial levels goal, although we assume that global warming will remain below 2°C.

We have also defined a more adverse "Alternative Scenario" that serves as a "what if" exercise. This scenario sees a significant lack of coordination among global institutions running mitigation policies that make it difficult to limit global warming to below 2°C. Ultimately, the transition to a Net Zero world would be delayed and the macroeconomic environment would worsen as the risks increase significantly.

Figure 1: Net CO2 emissions under the Central and Alternative scenarios



Source: Amundi Institute

To assist our analysis, we also modelled an "Old World" environment where no specific climate policies or climate impact are considered.

Old world	Central scenario	Alternative scenario
No specific climate politics or climate impact considered.	Incorporates some risk of delay. Slow introduction of climate policies starting from 2025, but proceeding in a muddled fashion. 1.5° C goal not reached, but limited to 2°C. Net Zero CO_2 emission targets are not met by 2050.	Divergent schemes introduced for a more efficient and quicker phase out of oil, but at a higher cost. Lack of global coordination among institutions. Insufficient policies to meet the 2°C target.

Source: Amundi Institute

While the Central and Alternative cases present limited physical risks (e.g. chronic high temperatures, disrupted agricultural productivity, higher sea levels or cyclones and wildfires), compared to a "hot-house" scenario of significant and irreversible global warming, they cause moderate to high transition risks that will unevenly affect growth and inflation dynamics.

Central scenario: the impact on growth is marginal, while the erosion of household purchasing power by high carbon and energy prices (and overall higher inflation) will already be high in the next decade, particularly for high carbon users.

Alternative scenario: while the delay in green policy adoption will limit the impact on inflation, fragmentation and the speed of the process will introduce more uncertainty, penalising investments and therefore growth particularly for countries with higher emissions (China, India).ESG investing, investors should pay greater attention on the investment managers' ESG investment framework and sources of ESG data.

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What outcome do we predict in economic terms?

Overall, the energy transition will further exacerbate regional and country divergences, as the five main macro implications from an active Net Zero 2050 climate policy will all bring higher fragmentation.

1. Ballooning debt will be the climate legacy. Debt will be needed to finance the infrastructure and electrification process behind the green transition.

2. A green commodities super cycle. To address climate change, a targeted taxation policy will push the costs of coal, natural gas and oil higher forcing their replacement with renewables.

3. The era of green quantitative easing begins. Central banks will provide the necessary support to finance government debt, limit the cost of capital and mitigate higher rates through green QE.

4. Heterogeneities across countries will be further exacerbated. Higher production costs and a less efficient production function will have different impacts on countries depending on their initial energy mix and future paths.

5. Expect lower earnings and a less market friendly environment. We expect lower earnings-per-share growth, low government bond yields, wider spreads and less complacent valuations driving lower absolute returns overall

What's changed in our approach?

Rethinking long-term equilibria

Despite numerous uncertainties and the limitations of models, we believe that revising the forecasting approach to incorporate the climate dimension is key to making better-informed asset allocation decisions.

Asset Class	New Climate-Aware Forecasting Methodology – main changes vs previous methodology
Government Bonds	Nominal interest rates continue to be a function of economic fundamentals (neutral rate, growth and inflation), with the explicit addition of adjustments for supply/demand factors (**government debt patterns**) and unconventional monetary policy (**central banks'** balance sheet management).
Credit	Corporate spreads are the results of nominal rates and investment profitability and therefore are affected by the **new EPS growth model** and by **private investment growth.**
Equities	Equity returns are a function of capital gains (driven by EPS growth, real GDP growth, inflation, government yields and unemployment) and income (dividends and buybacks). **New EPS growth model combines top line with bottom line** making the dependency on costs explicit (PPI, ULC).
Real Assets	Real asset returns depend on **new expectations for public listed assets, growth, inflation** as well as on assumptions for **volatility and liquidity risk** premiums.

Source: Amundi Asset Management CASM Model, for illustrative purposes only.

About HKRSA

The Hong Kong Retirement Schemes Association (HKRSA) was established in 1996 to promote the interests and best practices of retirement schemes in Hong Kong including provident and pooled retirement funds. The HKRSA is a not-for-profit, non-political association, which represents retirement schemes and their members, providing a forum for discussion of issues of current and topical interest.

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With its six international investment hubs , financial and ESG research capabilities, and long-standing commitment to responsible investment, Amundi is a key player in the asset management landscape, currently managing more than US$2.126 trillion of assets.