



LONG TERM THEMES

Who will finance the green transition? Can central banks help?

The green transition presents an unprecedented financing dilemma. The long-term financing requirement for countries to meet the net zero transition will require very large annual outlays, with the private sector taking on the lion's share if these ambitious targets are to be met. With public debt also at unprecedented levels in most advanced countries – following unusually large fiscal outlays to deal with recent shocks – it is difficult to see how governments could consider contributing any sizeable amounts. This begs the obvious question: What role can central banks play? Could accommodative monetary policy, similar to the long period of low policy rates following the Global Financial Crisis (GFC) be part of the solution?

The prolonged period of unconventional monetary policy following the GFC – low interest rates and large asset purchases (Quantitative Easing) – was possible because growth and inflation were unusually low due to impaired private sector balance sheets, particularly the balance sheets of financial institutions. Now, with inflation still above central bank targets and monetary policy still in restrictive mode, including a gradual unwinding of their balance sheets (Quantitative Tightening), central banks are not in an accommodative mode at this stage. But the demand for climate-related investment, while notionally high with respect to ambitious targets, is not high in practice. This is partly because many governments have recently scaled down their near-term ambitions to meet net zero targets.

AUTHORS

LORENZO PORTELLI

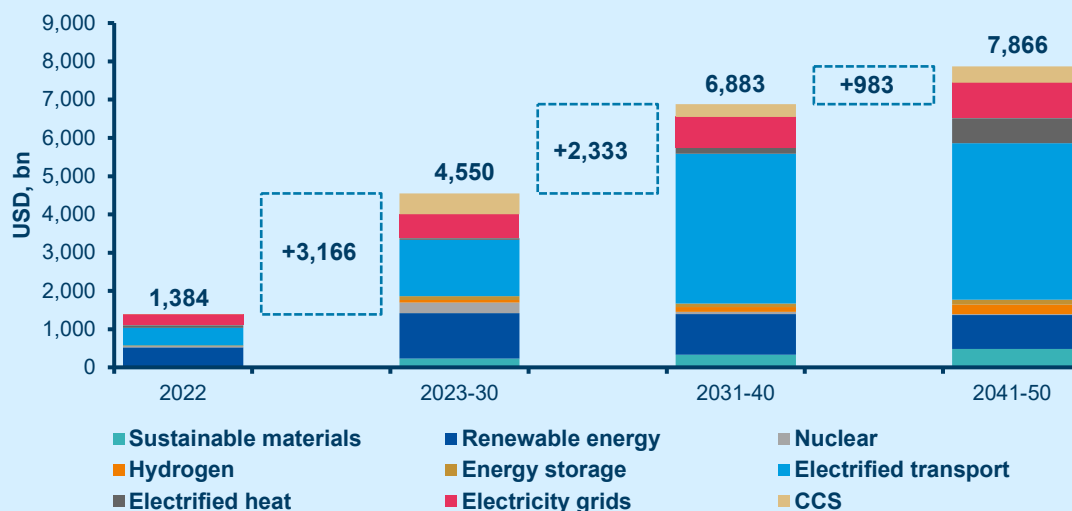
HEAD OF CROSS ASSET STRATEGY, RESEARCH, AMUNDI INVESTMENT INSTITUTE

MAHMOOD PRADHAN

HEAD OF GLOBAL MACROECONOMICS - AMUNDI INVESTMENT INSTITUTE

With public debt at unprecedented levels, it is difficult to see how governments could consider contributing any sizeable amounts.

CHART: Required investment should triple in the short term to get on track for net zero



Source: Amundi Investment Institute, BloombergNEF on Energy Transition Investment Trends 2023. 2022 energy transition and grid investment versus required annual investment in 2023-30, 2031-40, and 2041-50 in NEO 2022 Net Zero Scenario. Note: future values are from the New Energy Outlook 2022, except electrified transport, which is from the Electric Vehicle Outlook 2021 Net-Zero Scenario. The Net-Zero Scenario target global net zero by 2050 in line with 1.77 degrees Celsius of warming. Investment includes electricity grids. Data is as of January 2023.



Fiscal space in most countries is an important constraint, particularly in the face of the other demands governments are facing – higher defence expenditure and addressing the impact of higher inflation on low-income segments of their populations.

Private financing of the green transition will also face challenges. **Investment in green energy will require incentives in the form of higher expected returns than investments in old energy.** Governments can, and will need to, incentivise private investment through changes in relative prices that make old energy more expensive, primarily through higher carbon taxes (see article on page 16 for potential impact of carbon taxes), and other incentives, such as the Inflation Reduction Act in the United States. Technological advances, such as improvements in battery technology and more efficient use of renewable energy will likely also contribute to the net transition, and these may not require tax incentives, but the pace of such advances is inevitably uncertain.

Governments will also need to contribute, both through financing the necessary infrastructure (the public good element of the net transition) and participation with the private sector in financing larger projects. And these demands will compete with other demands on the public sector.

Regardless of the relative contributions of the public and private sectors, the aggregate demand for climate investment will be high and will extend over a long period. Climate experts estimate that the annual global demand for climate investment will be in the order of USD 4-5 trillion from 2030 to 2050. If the world manages to get to net zero by around 2050, markets will need to provide this funding at yields that are consistent with expected returns. This is a tall challenge. It almost certainly means that macroeconomic policy, including central bank actions, will need to ensure conducive financial conditions.

The challenge for central banks, especially in advanced economies, will be to reconcile their narrow monetary policy objectives – maintaining price stability at around 2 per cent inflation and gradually unwinding their large balance sheets – with maintaining relatively low long-term yields for markets to fund large public and private sector financing requirements. In principle, this can be done if real interest rates are not structurally higher, which would lead to higher neutral policy rates. Long-term productivity and demographic trends suggest real rates will revert to pre-GFC levels of around 1 per cent.

But returning to low real rates depends a lot on investment demand. Adverse geopolitical trends that lead to higher defence expenditure and a lack of private funding for climate investment, could raise real rates substantially. Central banks would then have to both scale back their QT programmes and indirectly fund investment demands through accommodative policy. This, however, will not be as simple to accomplish as during the period after the GFC, because they will also have to be mindful of a very different inflation environment.

The challenge for central banks will be to reconcile their narrow monetary policy objectives with maintaining relatively low yields for markets to fund large public and private sector financing requirements.



**SCAN OR
CLICK TO
VIEW
DIGITAL
VERSION**



IMPORTANT INFORMATION

This document is solely for informational purposes.

This document does not constitute an offer to sell, a solicitation of an offer to buy, or a recommendation of any security or any other product or service. Any securities, products, or services referenced may not be registered for sale with the relevant authority in your jurisdiction and may not be regulated or supervised by any governmental or similar authority in your jurisdiction.

Any information contained in this document may only be used for your internal use, may not be reproduced or disseminated in any form and may not be used as a basis for or a component of any financial instruments or products or indices.

Furthermore, nothing in this document is intended to provide tax, legal, or investment advice.

Unless otherwise stated, all information contained in this document is from Amundi Asset Management SAS and is as of 27 March 2024. Diversification does not guarantee a profit or protect against a loss. This document is provided on an "as is" basis and the user of this information assumes the entire risk of any use made of this information. Historical data and analysis should not be taken as an indication or guarantee of any future performance analysis, forecast or prediction. The views expressed regarding market and economic trends are those of the author and not necessarily Amundi Asset Management SAS and are subject to change at any time based on market and other conditions, and there can be no assurance that countries, markets or sectors will perform as expected. These views should not be relied upon as investment advice, a security recommendation, or as an indication of trading for any Amundi product. Investment involves risks, including market, political, liquidity and currency risks.

Furthermore, in no event shall any person involved in the production of this document have any liability for any direct, indirect, special, incidental, punitive, consequential (including, without limitation, lost profits) or any other damages.

Date of first use: 8 April 2024.

Document issued by Amundi Asset Management, "société par actions simplifiée"- SAS with a capital of €1,143,615,555 - Portfolio manager regulated by the AMF under number GP04000036 – Head office: 90-93 boulevard Pasteur – 75015 Paris – France – 437 574 452 RCS Paris – www.amundi.com

Photo credit: ©iStock/Getty Images Plus: Media Production, Stephan Zirwes, Walaiporn Sangkeaw, Klaus Vedfelt, Abstract Aerial Art

Chief editors

DEFEND Monica, *Head of Amundi Investment Institute*

GERMANO Matteo, *Deputy Group Chief Investment Officer*

MORTIER Vincent, *Group Chief Investment Officer*

Editors

BERTINO Claudia, *Head of Amundi Investment Insights & Publishing, Amundi Investment Institute*

FIOROT Laura, *Head of Investment Insights & Client Division, Amundi Investment Institute*

LOMBARDO Giulio, *Publishing Specialist, Amundi Investment Institute*

Design and Data Visualization

BENETTI Chiara, *Digital Art Director and Strategy Designer, Amundi Investment Institute*

FLASSEUR Vincent, *Data visualization manager, Amundi Investment Institute*

Contributors

BERTONCINI Sergio, *Senior Fixed Income Strategist, Amundi Investment Institute*

BROUSSE Pierre, *Equity Strategist, Amundi Investment Institute*

CESARINI Federico, *Head of FX Strategy, Amundi Investment Institute*

COADOU John, *Global equity strategist, Amundi Investment Institute*

DELBÒ Debora, *Senior EM Macro Strategist, Amundi Investment Institute*

Authors

BERARDI Alessia, *Head of Emerging Macro Strategy, Amundi Investment Institute*

GISIMUNDO Viviana, *Head of Quant Solutions, OCIO Solutions, Amundi*

PORTELLI Lorenzo, *Head of Cross Asset Strategy, Amundi Investment Institute*

PRADHAN Mahmood, *Head of Global Macroeconomics, Amundi Investment Institute*

RONCALLI Thierry, *Head of Quant Portfolio Strategy, Amundi Investment Institute*

USARDI Annalisa, *CFA, Senior Economist, Amundi Investment Institute*

WALSH Thomas, *Senior Quantitative Analyst, OCIO Solutions, Amundi*

ZANETTI Nicola, *Quantitative Analyst, OCIO Solutions, Amundi*

GEORGES Delphine, *Senior Fixed Income Strategist, Amundi Investment Institute*

HUANG Claire, *Senior EM Macro Strategist, Amundi Investment Institute*

MIJOT Eric, *Head of Global Equity Strategy, Amundi Investment Institute*

TAMBI Ayush, *Senior Equity Strategy, Amundi Investment Institute*