LONG TERM THEMES

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

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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.

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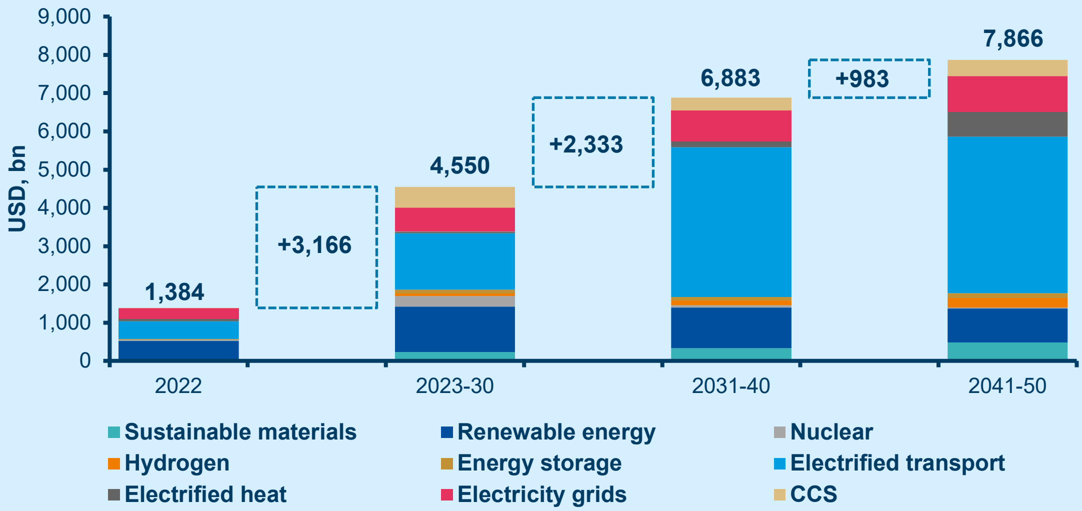
CHART: Required investment should triple in the short term to get on track for net zero



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.

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