nuveen
A TIAA Company

GLOBAL FIXED INCOME

Impact insights

ISSUE NO. 2.1

Introduction

President Trump was inaugurated on January 20, 2025. His second term started with a flurry of Executive Orders and DOGE-led incursions into federal agency budgets and staffing. The news flow has been fast and furious ever since. A common theme in client conversations has been concern that the new administration's policies will reduce the supply of impact securities while also weighing on the creditworthiness of agency and supranational issuers. While we grapple with the near-term headline risk and uncertainty, we don't believe this signals an end to impact investing in public fixed income markets as we have come to know it.

In fact, the recent scrutiny of ESG investing from Washington D.C. and various statehouses has cast a welcome light on our long-standing philosophy and process. We have used our approach since 2007 in pursuit of alpha, diversification, and risk management relative to broad market benchmarks. Regardless of shifts in sentiment or rhetoric, our focus remains on identifying positive social and environmental outcomes without sacrificing relative value (i.e. Nuveen's global fixed income impact approach). In broad market portfolios, we continue allocating to what we believe are the best managed and operated issuers with respect to financially material event risk (i.e. ESG leadership). The issuers we consider best-in-class, or ESG leaders, typically represent more stable free cash flow profiles than ESG laggards, which is exactly what we believe a high-quality bond investor should be seeking.

By contrast, asset management firms and investment products that leaned into ESG and related terminology as a marketing tool have largely gone quiet. And it's true in Europe as well, ahead of the ESMA names rule for funds coming into effect in May 2025. But we're happy to repeat ourselves: our approach has not changed. We invest intentionally for impact based on the twin pillars of transparency – made possible by use of proceeds structures – and disclosure via outcomes-based reporting.

In the pages that follow, we have collected some of the most common impact-related questions from clients since the beginning of the year, along with our assessment of the risks and opportunities.

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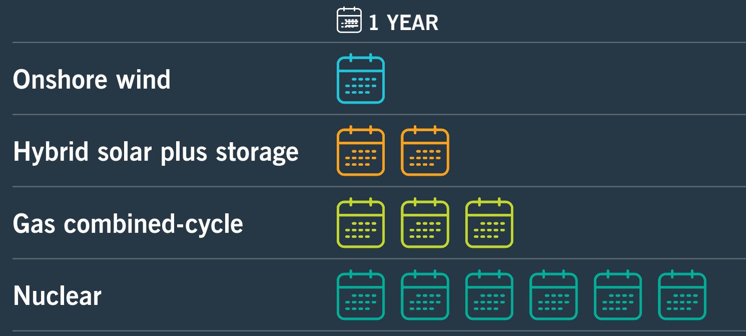
Renewable energy is cheap and getting cheaper

Economic viability: Renewables cost competitiveness is becoming more entrenched with further technological advancements, as shown in the LCOE charts for three leading industrialized nations. Fossil fuels will struggle to match their affordability, cost certainty relative to commodity price volatility, and shorter construction timelines to bring much-needed capacity to market. While the Trump administration may scale back incentives and subsidies, renewable generation is expected to grow in parts of the country where it is economically advantageous. At the end of the day, shareholder-owned utilities have a profit motive.

Bipartisan support: Republican-led congressional districts received three times as much clean energy and manufacturing investment ($165 billion) as Democratic districts ($54 billion) under the Inflation Reduction Act (IRA).

Meeting energy demand: The rise in artificial intelligence (AI) has been driving rapid expansion and new construction of datacenters, which is fueling a significant increase in energy demand. The International Energy Agency (IEA) forecasts global data center demand will more than double between 2022 and 2026. Renewables will play a central role in addressing this demand surge given they can be constructed (and often permitted) more quickly than other power sources.

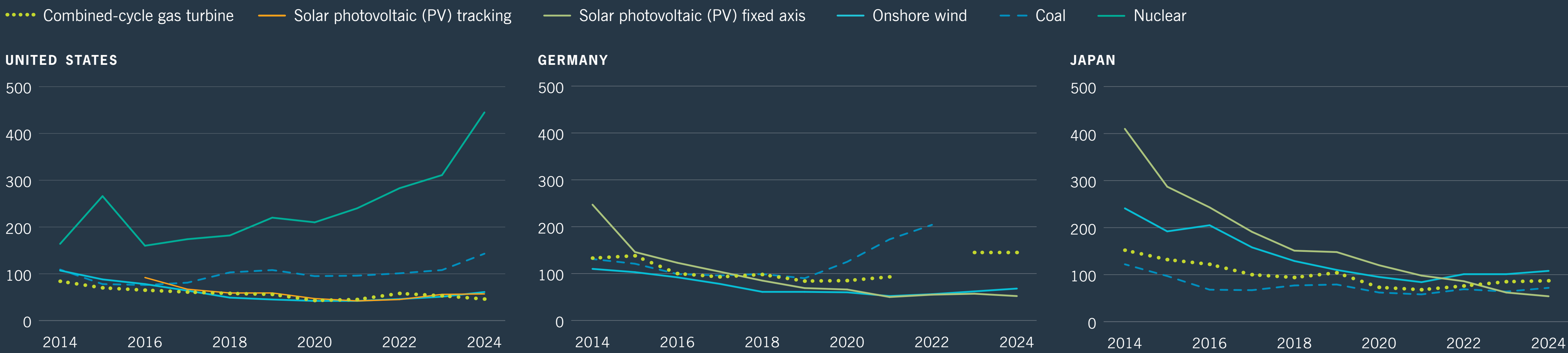
APPROXIMATE CONSTRUCTION TIMELINES FOR SELECT POWER PLANT TYPES



Source: SP Global Market Intelligence: US energy and nuclear outlook

LEVELIZED COST OF ENERGY (LCOE)

($/megawatt-hour)



Source: BloombergNEF; No 2022 data for combined-cycle gas turbines in Germany. Coal data not available for 2023 and 2024 in Germany.

Meeting energy demand presents ongoing challenges for U.S. fossil production, making renewables an economical part of energy security policies

Demand for gasoline (refined petroleum) is not far from 2018's peak and electricity demand continues to grow as data centers proliferate. The current administration is prioritizing energy independence and energy security. The concepts are closely related, but neither is sustainable without renewable energy investment.

Energy independence means that supply to match demand can be produced domestically. Expanding oil and natural gas production is one way to accomplish that. Yet the United States is already producing at historical highs, and current forecasts indicate that recent growth trajectories will taper, as shown in the charts at right. Increasing crude production will be both pipeline capacity constrained and cost prohibitive based on current capital costs and expected output/ROI estimates. Natural gas production will likely continue to grow, albeit at a slower pace constrained by increases in pipeline capacity.

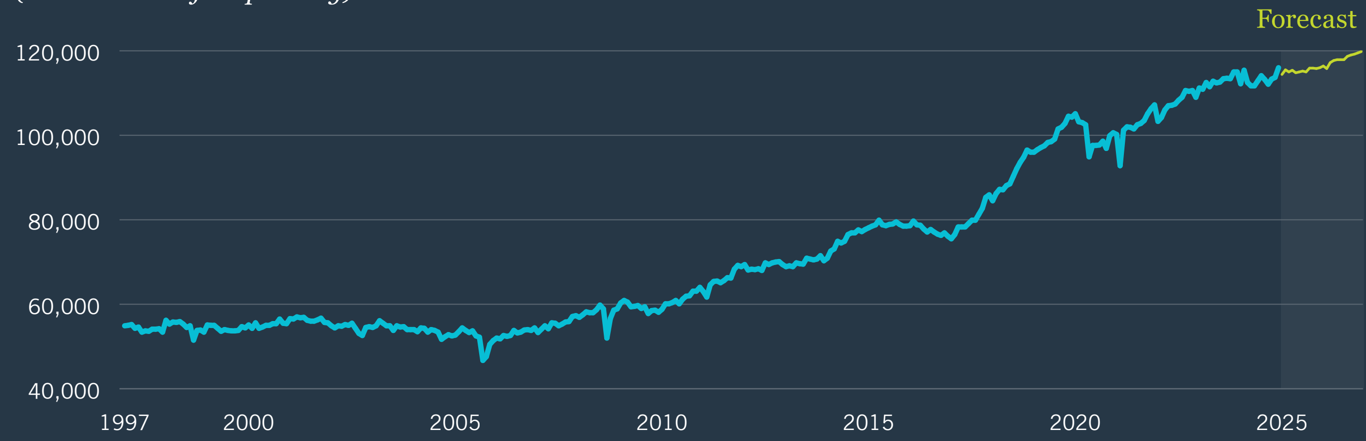
Energy security refers to the consistency, reliability, and affordability of supply. The cost of new natural gas and nuclear generation is rising faster than the costs of renewable generation, even when viewed against the backdrop of tariffs and inflation trends. Construction timelines are rising for new natural gas and nuclear plants, while renewable lead times continue to fall. All of which means renewables are likely to be a key part of strategic energy security solutions.

U.S. FIELD PRODUCTION OF CRUDE OIL

(Thousand barrels per day)

U.S. NATURAL GAS PRODUCTION

(Million cubit feet per day)



Source: U.S. Energy Information Administration.

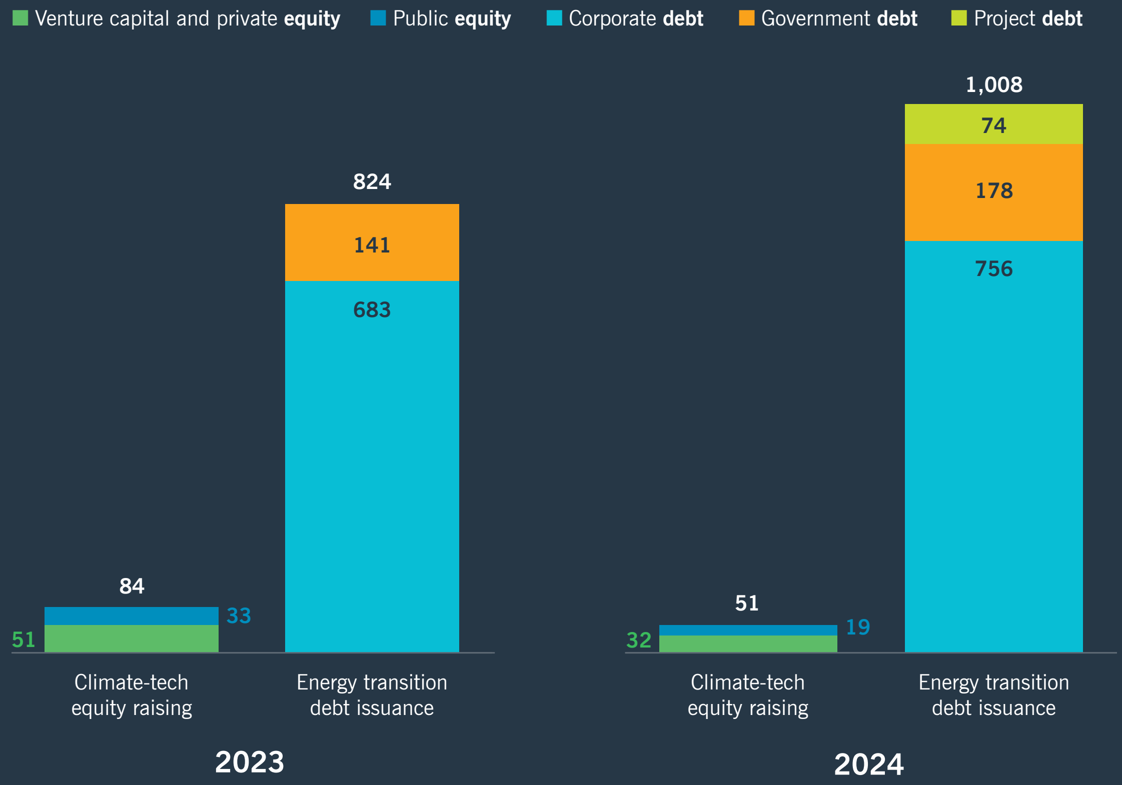
Financing the energy transition via debt markets enables capital to scale more quickly than in equity markets

Capital spending on the energy transition is forecast to grow to $3-5 trillion annually by 2030 — two to four times current outlays.[1] The demand for capital is expected to accelerate.

As an impact investor, we don't create or adhere to hard-and-fast exclusions. A key pillar of our approach is that the debt market offers a path to financing transition activities, infrastructure buildouts and modernization, R&D, innovation, and margin enhancing capital expenditures across industries globally, including the hardest-to-abate companies and operating models. When an energy, utility, or industrial company issues use of proceeds debt, we consider it. Companies can increasingly justify capital spending plans that scale renewable generation because it is cheaper – not because of a philosophical preference or political bias. Often, the cheapest source of funding is the debt capital markets.

Use of proceeds bonds, designated for specific, clearly defined projects and outcomes, are key to the rapid deployment of capital. For example, public utilities often seek funding to apply proven technologies at scale. In contrast, private equity and venture capital firms operate on different timelines, and their impact investments are often for new technologies at early stages, accompanied by meaningfully higher operational risk and volatility. Such R&D efforts are essential, as scalable technology cannot be perfected without experimentation and failure. But the opportunity to finance "shovel-ready" capital expenditures is primarily the domain of debt markets.

FINANCING THE ENERGY TRANSITION IN DEBT AND EQUITY CAPITAL MARKETS
($ Billions)



Source: BloombergNEF. Data shown represents historical data and does not predict or guarantee future results. As of 31 Dec 2023 (left) and 31 Dec 2024 (right). Regions represented include Americas, Asia Pacific, Europe, Middle East and Africa.

1 The International Energy Agency forecasts capital spending on the energy transition will grow to $3 trillion to $5 trillion annually by 2030—two to four times current outlays. Energy Transition: Delivering Capital Projects On Time and On Budget | Bain & Company.

"Green hushing" to appease the current administration has not stopped Nuveen from identifying attractive labeled or unlabeled impact opportunities

Over the first two months of 2025, we've seen a slowdown in labeled Green, Social, and Sustainable (GSS) issuance from U.S. corporations (top chart). Corporate issuers that previously came to market with labeled bonds have issued nonlabeled, general corporate purpose debt for similar projects and outcomes.

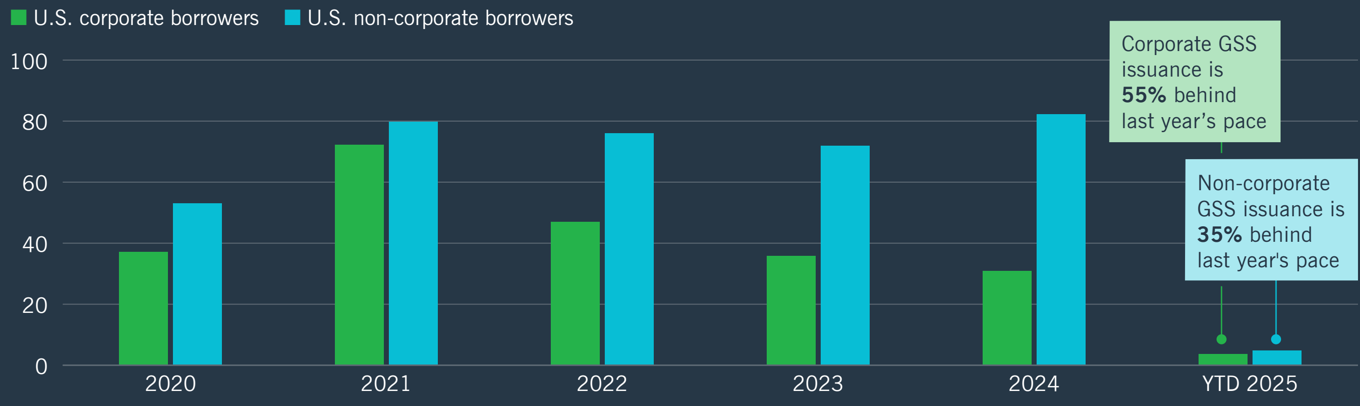
The market has coined the term "green hushing" to describe this behavior: purposefully downplaying sustainable projects or goals in response to the Trump administration's anti-ESG rhetoric. We expect this to continue through at least the first half of the year until there is more visibility into executive and congressional policy priorities, and the judicial branch's approvals/reversals. Ultimately, corporations are unlikely to make strategic capital expenditure decisions based on one election result, and intentional investors represent a useful pool of capital to tap into.

While U.S. corporate labeled issuance may face near-term headwinds, our portfolios are diversified across corporate issuers globally as well as non-corporate sectors. Labeled issuance across corporate and non-corporate borrowers continues to positively trend on a global basis (bottom chart), which continues to broaden the impact opportunity set.

Furthermore, the team is not reliant upon green, social, or sustainability labels to identify or select impact investments. Rather, we evaluate opportunities through our "direct and measurable" framework, which promotes the principles of transparency and disclosure with respect to use of proceeds and outcomes. Our expertise and experience in the impact market, combined with our deep and talented research team, allows us to focus on deals and projects that others don't consider. A couple examples of unlabeled use of proceeds bonds that qualify for Nuveen's impact framework are described on the following page.

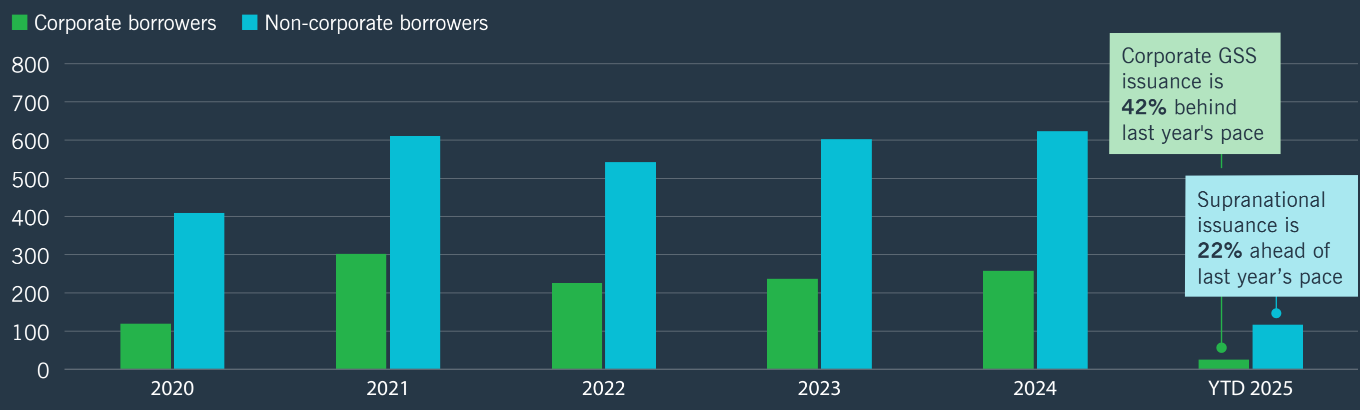
GLOBAL ISSUANCE OF LABELED GSS DEBT BY U.S. BORROWERS

($ Billions)



GLOBAL ISSUANCE OF LABELED GSS DEBT (EX-U.S. AND CHINA BORROWERS)

($ Billions)



Source: Environmental Finance. Data as of February 2025

Recent unlabeled impact investment examples

November 2024: Abilene Christian University

The team purchased a new issue from Abilene Christian University (ACU), an A-rated private Christian research university located in Abilene, Texas. The bond was issued to finance energy improvements at the school. The program will be managed through a guaranteed energy savings contract through Bernhard Energy Solutions, which offers “energy as a service” solutions. The deal finances the development of solar generation, which is anticipated to produce more than 100% of electricity demand at the school and result in ~29% reduction in energy use and elimination of scope 2 emissions. Nuveen engaged with the issuer and underwriter to secure annual impact reporting after Bernhard had concerns about disclosing proprietary information. We would not have participated in the deal without such reporting, so when the agreement was finally reached, our participation allowed the deal to price and come to market.

February 2025: American Water

American Water is the largest publicly traded water utility in the United States, providing water and wastewater services across 25 states and Ontario, Canada. Proceeds from the bond will be used to fund various water and wastewater system improvements. Investments in water infrastructure support the development of sustainable and resilient water systems that protect public health, safety, and the environment.

Impact theme: Renewable energy and climate change

UN SDG ALIGNMENT

Impact theme: Natural resources

UN SDG ALIGNMENT

DOGE-led shutdown of USAID has negligible effect on the bond market

The largest outstanding USAID bond will mature in June 2025, and we expect timely repayment of interest and principal in full, given the potential fallout of defaulting on a full faith and credit instrument that is quite small relative to the government's total outstanding debt obligations.

USAID has not issued bonds since January 2017. Of the 25 USAID bonds issued this century for just $15.5 billion, only three have yet to mature, totaling $970 million of principal outstanding. Of the $41.4 billion issued historically, only $1.8 billion remains outstanding.

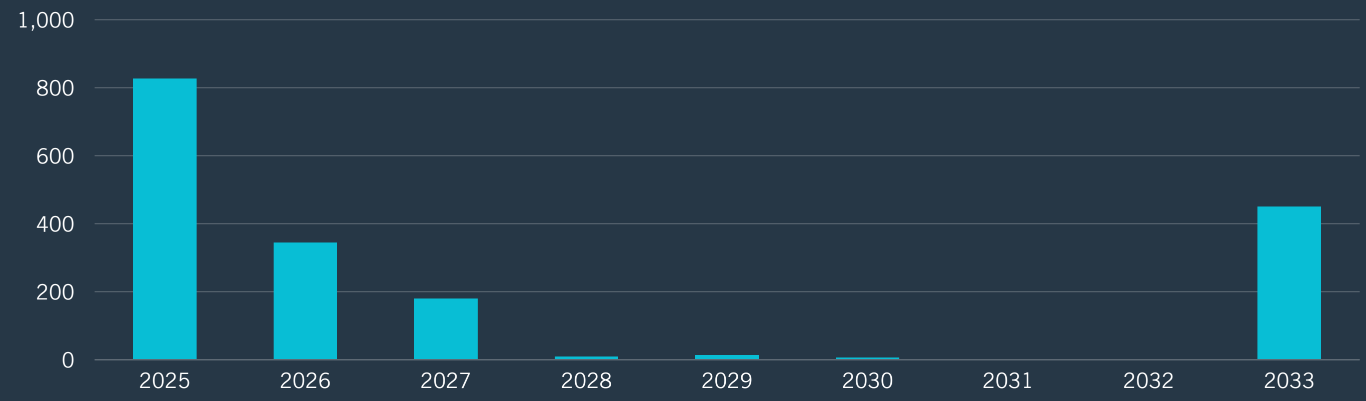
Administrative suspension of USAID may encourage further blended finance transactions to come to market. In the absence of foreign aid, more emerging market sovereign borrowers may pursue debt for nature swaps or similar de-risking/de-leveraging transactions to reduce debt service costs and put some of the savings towards environmental or social programs.

USAID disbursements represent a relatively small proportion of GDP for recipient countries, and are unlikely to spur macroeconomic imbalances when discontinued. Reduced foreign inflows could add to near-term fiscal or balance of payment strains in some countries such as Jordan (2.3% of GDP) or Zambia (1.5%). But the importance of countries like Jordan to U.S. foreign policy in the Middle East suggests that foreign aid will persist in some fashion.

In fiscal 2023, the U.S. government disbursed $71.9 billion in foreign aid, with USAID distributing $43.8 billion, or ~60%. So the agency is not the only path to aid payments. While the future of USAID may ultimately be determined by the courts, we believe it won't have a material effect on the bond market given its limited historical presence as an issuer.

UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT (USAID) OUTSTANDING MATURITIES BY YEAR

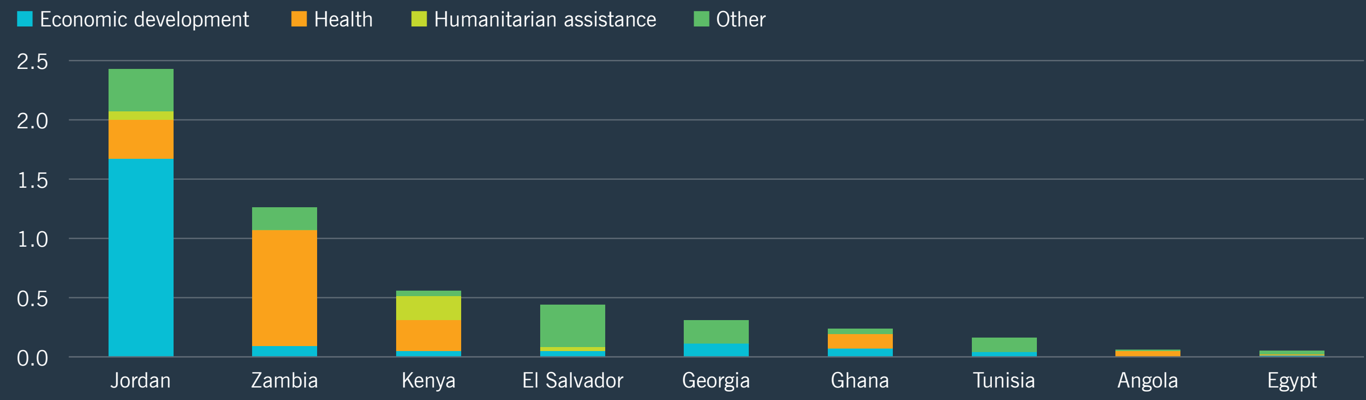
($ Millions)



Source: Bloomberg. Data as of February 2025

USAID DISBURSEMENTS IN 2024

(% of GDP)



Source: USAID Foreign Assistance

Multilateral Development Bank (MDB) programming and resources are insulated from any single member's decisions

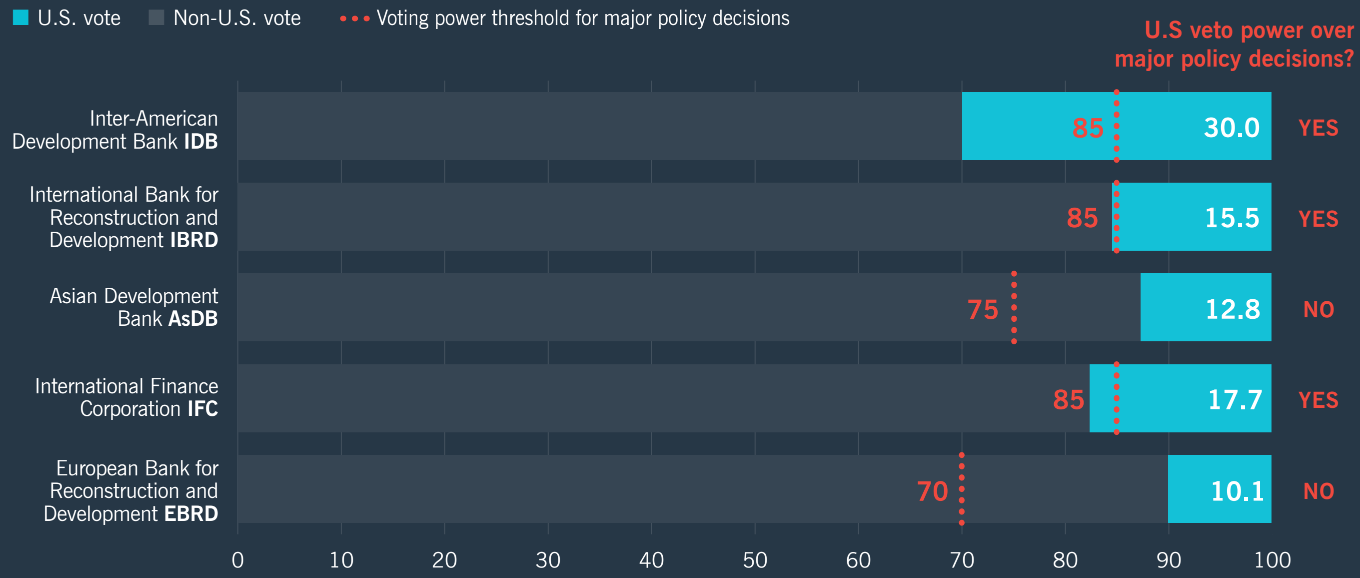
MDBs are structured in a way that minimizes risk of disruption, regardless of a single member's actions. Entities like The World Bank, which issues debt as the International Bank for Reconstruction and Development (IBRD), receive most of their funding via capital market borrowing, not direct member funding. That said, a member's voting power is closely related to its pro rata share of capital commitments, but can be adjusted to accommodate basic votes* to other members.

The presence of large developed economies as members enables MDBs to raise capital at some of the lowest costs in the bond market. A complete withdrawal by the U.S. may marginally increase borrowing costs and possibly impact the nature of future MDB lending; however, there would be almost no impact to the creditworthiness of a MDB's existing loan portfolio. In 2020, the European Investment Bank's largest member, the UK, exited the MDB as part of Brexit without impact to its bond rating or lending activity.

To the extent the United States pulls back commitments to an MDB, it will likely seek to retain voting power thresholds that provide political influence. This would enable the United States to sway the projects and programs funded, as well as recipient countries, based on the administration's policy priorities. The Inter-American Development Bank, in which the U.S. has the largest share of commitments, is likely to remain a policy priority, given the MDB's geographic focus.

U.S. VOTING POWER

(%)



Source: Data sourced from Multilateral Development Banks 2024 annual reports and financial statements.

*In MDBs, "basic" membership votes are allocated to member countries to ensure a minimum level of influence for each member, regardless of their financial contribution.

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