

SECTOR IN-DEPTH

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Infrastructure & Project Finance – Vietnam

Funding diversity involving private sector will promote infrastructure development

Funding diversity to secure sustainable, incremental funding sources will be increasingly important to [Vietnam](#) (Ba3 positive), given the vast investment needed to develop its infrastructure. The Vietnam government's initiatives – such as the new Public-Private Partnerships (PPP) law and renewable energy development plan – will help broaden and stimulate funding solutions. The improving credit quality of the Vietnam sovereign will support infrastructure funding, because it can directly or indirectly affect the credit risk of infrastructure issuers in the country.

- » **Vast investment needs for infrastructure expansion and upgrades will increase the importance of funding diversity.** We expect that Vietnam will invest \$230 billion — \$280 billion or higher over 2021-30 to develop infrastructure (particularly power and roads), subject to the availability of funding. Incremental funding beyond traditional channels (such as tax revenue and loans from foreign governments and multilateral development banks) will support Vietnam's ability to meet its investment needs.
- » **Government initiatives will help attract private sector investors' appetite for infrastructure assets.** The new PPP law represents a significant step forward in procuring and financing infrastructure. There are positive developments, including the introduction of risk sharing between state and project companies. These are balanced by some less favorable terms when compared to those observed in more developed countries. The government's aim to promote renewable development and expand nationwide grid networks will also increase investor appetite.
- » **Solid access to international debt capital markets will enhance funding diversity for infrastructure development.** Additional funding sources (including corporate or project bonds) on top of Vietnam's traditional funding channels will enhance funding diversity for infrastructure development in Vietnam. In particular, international debt capital markets, which are deep and large, can provide longer tenors that match institutional investors' long-dated liabilities, while nascent domestic capital markets continue to develop over time.
- » **Vietnam's improving credit quality will further support funding diversity.** The sovereign's improving credit quality will have a positive impact on infrastructure projects, which benefit from the government's contractual commitments. The credit risk of state-owned companies, which are the major infrastructure developers or off-takers, will also decline if Vietnam continues to strengthen its credit quality and there is a solid track record of the government providing timely support to those companies, if needed.

Vast investment needs for infrastructure expansion and upgrades will increase the importance of funding diversity

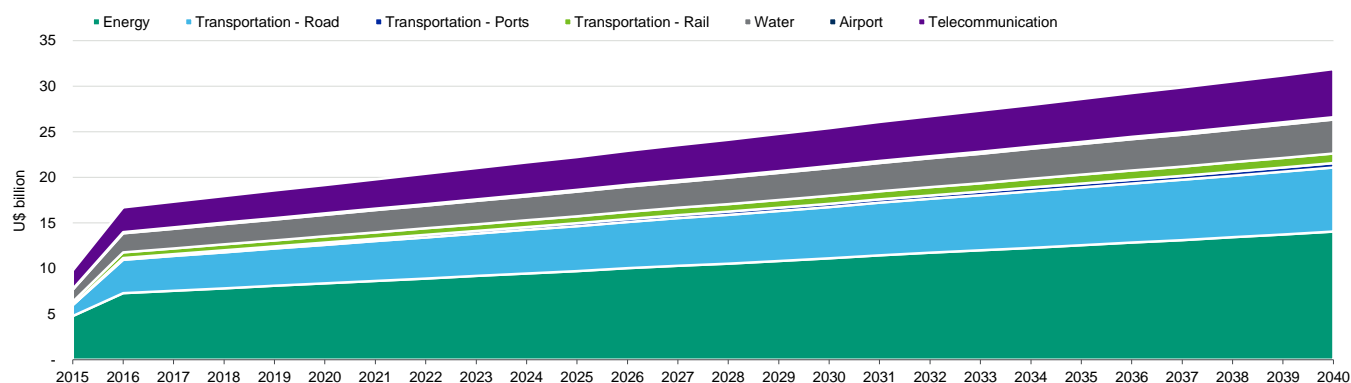
Expanding and upgrading infrastructure is essential for [Vietnam](#) (Ba3 positive) to maintain solid prospects for economic growth and particularly as it continues to benefit from supply chain relocation from [China](#) (A1 stable). The traditional funding channels for Vietnam – including tax revenue, and bilateral and multilateral loans from foreign governments and multilateral development banks (MDBs) – will remain the major funding sources for infrastructure development in Vietnam. Incremental funding beyond the traditional funding channels and funding diversity will no doubt support the funding of Vietnam's investment needs for infrastructure expansion.

We expect that Vietnam will invest \$230 billion — \$280 billion or higher over 2021-30 to develop infrastructure, subject to the availability of funding. We assume that Vietnam's infrastructure investment will account for 6%-7% of the country's nominal GDP annually, which was the case for 2016-2019, or higher. We project that Vietnam will record real GDP growth of around 7.2% in 2021, followed by around 6.5% growth annually for 2022-2024.

The Global Infrastructure Hub (GIH), which supports G-20 countries' agenda on infrastructure, estimated in its Global Infrastructure Outlook 2017 that Vietnam's investment in the infrastructure sector would amount to \$506 billion from 2016-2040 (Exhibit 1). We see an increasing likelihood that infrastructure investments will grow faster than GIH's outlook, given solid economic growth. For example, Vietnam's government plans to invest around \$128 billion to develop power facilities over 2021-30 (comprising \$95 billion for power generation capacity and \$33 billion for power grids), based on its request for comments in February 2021 regarding the draft "National Power Development Planning Project for the period 2021-2030, with a vision to year 2045" (Power plan VIII).

Exhibit 1

Infrastructure investments will continue to increase in Vietnam, in line with its economic growth



Source: GIH's Global Infrastructure Outlook 2017

Energy (including power) and roads will be the main sectors to be developed, collectively accounting for around 80% of the GIH's estimates for total investment in 2016-40. Continued expansion of power facilities is needed to meet fast-growing power demand in Vietnam and to develop renewable sources to reduce the carbon footprint. The government also plans to expand and improve toll roads to increase connectivity among major cities across the country. Only around 20% of the country's national roads were paved, according to the [Infrastructure Vietnam 2019 event's opening ceremony](#) in July 2019, which was sponsored by the Ministry of Industry and Trade of Vietnam.

The traditional funding channels for Vietnam will continue to support infrastructure development in the country. Furthermore, infrastructure projects that could benefit from credit enhancements provided by multilateral financial institutions and export credit agencies could have mitigants against country-specific risks, including (1) political risks, (2) the credit strength of key project counterparties, which may include the host government and state-owned companies, (3) evolving legal and regulatory frameworks, and (4) any potential concerns regarding transparency and corporate governance.

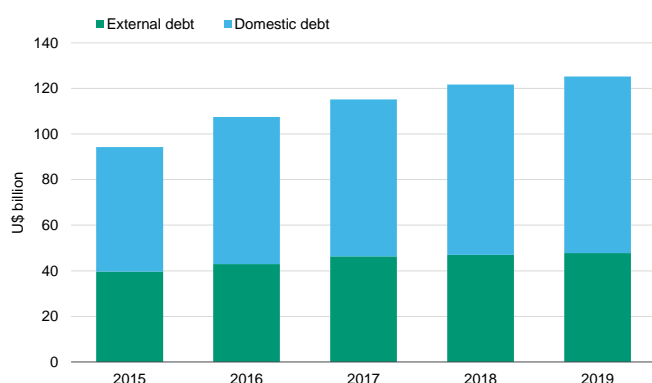
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However, traditional funding channels may not suffice given the need for vast investment and funding diversity and the involvement of private sector investors will be increasingly important. Furthermore, funding availability from traditional funding channels may be constrained if the financing providers need to focus more on broader objectives rather than just infrastructure or they see a greater need to manage their balance sheets as demand for their capital continues to grow. In addition, Vietnam's graduation to a lower middle-income country will reduce the availability of MDB funding under the most concessional terms, which is mostly directed toward lower-income countries.

Infrastructure investments in Vietnam have been mostly led by the government, which has secured funds through both external and domestic debt including local currency bonds (Exhibit 2). Nearly all of the government's external debt has been provided by advanced countries, including [Japan](#) (A1 stable) and, to a lesser extent, [Korea](#) (Aa2 stable) and [France](#) (Aa2 stable), and MDBs such as the [World Bank](#) (Aaa stable) and [Asian Development Bank](#) (Aaa stable) in the form of official development assistance (Exhibit 3). Foreign direct investment of around \$40 billion in 2019 flowed mainly into manufacturing, trade and real estate, with a smaller allocation to infrastructure development, according to the Ministry of Finance of Vietnam's statistics.

Exhibit 2

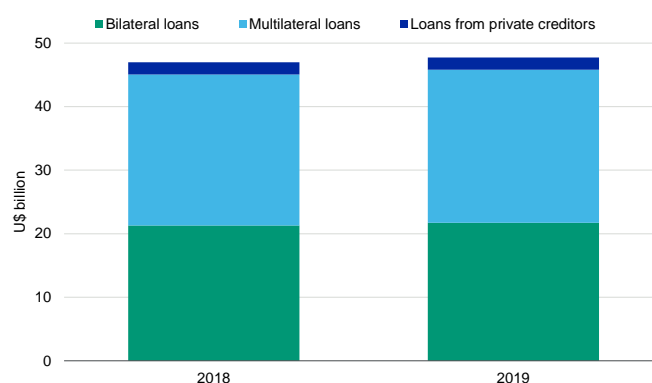
Government debt, the main funding source for infrastructure development, has increasingly relied on local market debt ...



Source: Ministry of Finance of Vietnam

Exhibit 3

... while its external debt has been mostly provided under concessional terms



Source: Ministry of Finance of Vietnam

Government initiatives will help attract private sector investor appetite for infrastructure assets

We expect Vietnam's government will continue to implement initiatives – including advances on contractual frameworks for Public-Private Partnerships (PPP) and renewable development to reduce carbon footprint, along with expansion of nationwide grid networks – to attract private investor participation in infrastructure development. The initiatives seek to improve policy transparency as well as predictability. Private investors include both domestic onshore sponsors and funders, as well as regional and international providers of capital.

These initiatives have the potential to increase investor interest, particularly in renewable, toll road and rail projects that involve credit enhancement such as government support. This is mainly because of (1) policymakers' and investors' increasing focus on ESG, and growing interest in environmentally friendly assets amid tightening environmental regulations and improving economics for renewables; and (2) the government's likely policy support for toll road and rail projects under its efforts to improve connectivity within and across major cities in Vietnam. They will also reduce the likelihood of grid curtailments, which is a key risk factor to power companies or projects without compensation mechanisms for lower dispatch.

As part of the initiatives, the government has been making progress in developing contractual legal frameworks for infrastructure projects under the new PPP law, which took effect from January 2021. The PPP law represents a significant step forward in procuring and financing infrastructure.

There are positive developments under the new law, including the: (1) introduction of sharing of revenue surplus and shortfall between the state and project companies; (2) standardization of PPP contracts in permitted industrial sectors, along with clarification of

investment process and reduction of requirements for equity contributions from private investors; (3) allowance of bond issuance to fund PPP projects; and (4) inclusion of early termination rights.

These positive developments are balanced by some less favorable terms when compared to PPP frameworks in developed countries, such as around (1) details for standard contracts for PPP projects; (2) how early termination payments are calculated; and (3) the prohibition of application of foreign laws to PPP project contracts.

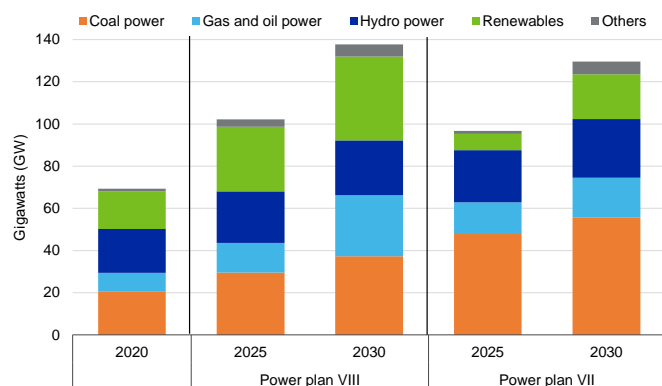
We expect that further advances in the contractual frameworks and solid track record of regulatory consistency for PPP contracts over time will support increasing participation from private investors in PPP contract-based infrastructure projects. Furthermore, greater information transparency and disclosure – for example in relation to off-taker credit quality and ESG considerations – will buttress development of the infrastructure sector in Vietnam.

In February 2021, Vietnam's government issued a request for comments regarding the draft "National Power Development Planning Project for the period 2021-2030, with a vision to year 2045" (Power plan VIII). The key highlights in the plan are: (1) to promote renewable energy development with a focus on solar and wind to reduce the country's carbon footprint; (2) to increase gas power; and (3) to reduce the country's reliance on coal power. The government will also focus on expanding its nationwide grid networks and removing grid overloads to ensure that power generated from new generation capacity is properly supplied to the economy.

Under the Power plan VIII, Vietnam's government aims to expand the country's power generation capacity at a cumulative average growth rate (CAGR) of 7% to 138 gigawatts (GW) in 2020-30, with a focus on renewable and gas. Vietnam's total power capacity and its reliance on renewable and gas are greater in the Power plan VIII than in the previous Power plan VII (Exhibits 4 & 5), thereby demonstrating the government's clear move toward cleaner power sources. The government also aims to expand Vietnam's nationwide transmission grids at CAGRs of 10% to 23,692 kilometers for 500 kilovolt (kV) lines and 8% to 41,567 kilometers for 200 kV lines in 2021-30, along with substations.

Exhibit 4

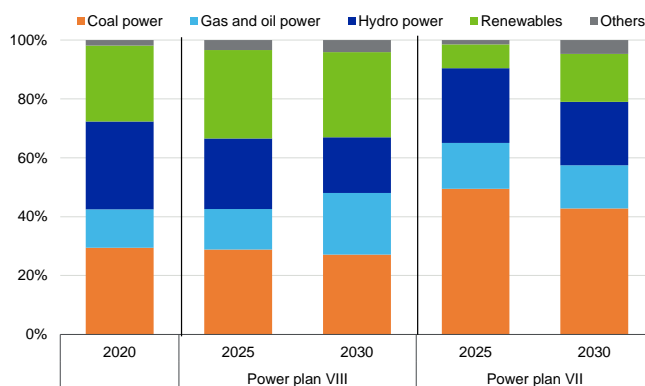
Renewables and gas power will lead capacity growth in Vietnam



Source: Government of Vietnam's Power plan VIII

Exhibit 5

Share of renewables and gas in the power mix will increase at the expense of coal and hydropower



Source: Government of Vietnam's Power plan VIII

Solid access to debt capital markets will enhance funding diversity for infrastructure development

Additional funding sources (including corporate or project bonds) on top of Vietnam's traditional funding channels will enhance funding diversity for infrastructure development in Vietnam. In particular, international debt capital markets, which are deep and large, can provide longer tenors that match institutional investors' long-dated liabilities, while nascent domestic capital markets continue to develop over time. From the perspective of debt capital market investors, well-structured project and infrastructure transactions may provide an attractive risk-adjusted return. Those investors may also seek investment diversity and exposure to unique project and infrastructure opportunities.

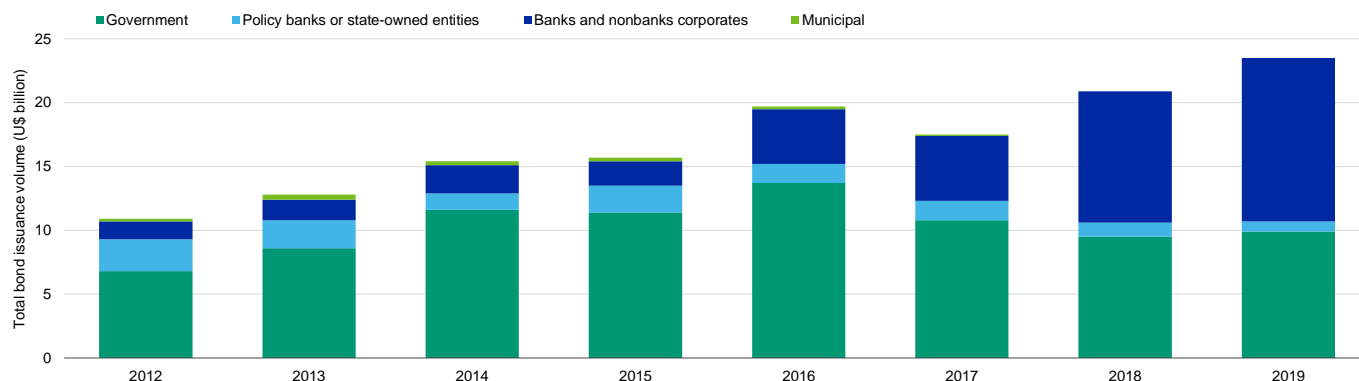
Bonds from Vietnam's infrastructure sector could meet the risk appetite of institutional investors in international debt capital markets if issuing entities – including major infrastructure companies, which are typically state-owned entities, and infrastructure projects –

demonstrate cash flow predictability and can mitigate off-taker/supplier risk and foreign currency exposure stemming from currency mismatch between cash inflows and cash outflows. For example, [Mong Duong Finance Holdings BV](#) (Ba3 positive) issued project bonds of \$678.5 million with a tenor of around 10 years into international debt capital markets in August 2019.

Bond issuance volume in the domestic debt capital market increased at a CAGR of 11% to \$24 billion in 2015-19. But this market is likely to remain a limited funding source for infrastructure development over at least the next 2-3 years, mainly because it is still developing and is not deep enough to accommodate the funding needs for infrastructure projects with long-term investment time horizons. Bond issuance in the domestic debt capital market has been dominated by the government and banks (see Exhibit 6), with typical bond tenors of up to five years for banks and three years for companies. Domestic Infrastructure project bonds with long tenors are at a nascent stage, although the new PPP law's allowance of bond issuance is a positive development.

Exhibit 6

Domestic capital market may not cover funding needs to develop infrastructure



Sources: Asian Development Bank referencing Techcombank Securities and Viet Nam Bond Market Association

Local banks may not substantially grow their loans for infrastructure development because those banks' loan growth is controlled by State Bank of Vietnam (SBV), which sets a loan growth target for the banking system every year. SBV's loan growth target is cascaded down to individual banks in the banking system. Those banks have to comply with the limits allotted, and approval from SBV is required if they wish to grow faster than the limit. In addition, those banks will need to raise long-term funding if they wish to grow their long-term loans. SBV places limits on the maximum percentage of short-term funds banks can use to fund medium- and long-term loans, while infrastructure projects have long-term investment time horizons.

Vietnam's improving credit quality will further support funding diversity

The sovereign's improving credit quality will have a positive impact on infrastructure projects, which benefit from the government's commitments in the form of guarantees or undertakings, or both. The credit risk of state-owned infrastructure companies, which are the major infrastructure developers or off-takers, will also decline if Vietnam continues to strengthen its credit quality and there is a solid track record of the government providing timely support to those companies, if and when needed. The credit quality of state-owned infrastructure companies and projects affects their ability to raise funds from debt capital markets.

The sovereign's improving credit quality indicates its strengthening debt management associated with the government's indirect debt obligations – including payment guarantees by the government and off-taking commitments by the government, if needed, on behalf of state-owned infrastructure companies. Therefore, the sovereign's higher credit quality will benefit the credit quality of infrastructure projects with the government's commitments, in the form of guarantees or undertakings, or both. The positive outlook on Vietnam's Ba3 rating reflects signs of broad-based improvements in institutions and governance strength that may strengthen Vietnam's credit profile over time, especially as the economy may benefit from the medium-term changes accelerated by shifts in production location and demand following the coronavirus pandemic.

State-owned infrastructure companies, which are strategically important to the economy, will benefit from the government's improving credit quality, given their close relationships, if the government continues to improve its institutions and governance strength, including its administrative capabilities.

The higher credit quality of those infrastructure companies and projects will increase their ability to raise funds from private sector investors – including debt capital markets – to develop Vietnam's infrastructure under the government's plan, when needed. In addition, the state-owned infrastructure companies will continue to have a significant impact on the credit risk of infrastructure projects because those companies are typically the off-takers of various infrastructure projects, and therefore influence the credit quality of those projects.

Those state-owned infrastructure companies include Vietnam Electricity (EVN) in the country's power sector, Vietnam Expressway Corporation (VEC) in the road sector, Airports Corporation of Vietnam (ACV) in the airport sector and Vietnam National Shipping Lines (Vinalines) and Saigon Newport Corporation (SNC) in the port sector.

Among emerging market peers in the Association of Southeast Asian Nations (ASEAN), we have observed that [Indonesia](#) (Baa2 stable), [Malaysia](#) (A3 stable) and the [Philippines](#) (Baa2 stable) have built a track record of funding diversity involving private sector. The various modes of private financing include bank syndicated loans, bonds issuance by infrastructure companies, project financing and participation in PPP projects. These countries' greater level of funding diversity for infrastructure development has benefited from the higher credit quality of their respective sovereign governments, which in turn support state-owned off-takers' credit quality or longer track record of policy support, or both.

Indonesian infrastructure companies and infrastructure projects – including state-owned [Perusahaan Listrik Negara \(P.T.\)](#) (Baa2 stable) and power assets related to Paiton Energy ([Minejasa Capital BV](#); Baa3 stable), Banten 1 ([LLPL Capital Pte Ltd](#); Baa3 stable), and [Star Energy Geothermal Wayang Windu Ltd](#) (Ba3 stable) — have established access to international debt capital markets, partially mitigating still developing domestic financial market. Rated international bonds, issued by Indonesia's 10 infrastructure companies and projects in various infrastructure sectors – power, gas, toll road and port -- amounted to around USD22 billion at end-March 2021. By contrast, Malaysia has been successful in ramping up domestic private sector investment in infrastructure, including local-currency project bonds and sukuk, given the depth of the domestic capital market. The Philippines has also attracted private sector investment into infrastructure development through both the current administration's Build! Build! Build! Programme and the last administration's PPP program, although these have not led to significant volumes of related bond issuance.

Moody's related publications

Press Release

- » [Moody's affirms Vietnam's Ba3 rating, changes outlook to positive](#), 18 March 2021
- » [Moody's changes Mong Duong Finance's outlook to positive; affirms Ba3 senior secured rating](#), 19 March 2021

Credit Opinion

- » [Government of Vietnam](#), 19 March 2021
- » [Mong Duong Finance Holdings BV](#), 22 March 2021

Issuer In-Depth

- » [Government of Vietnam - Ba3 positive: Annual credit analysis](#), 7 April 2021

Sector In-Depth

- » [Infrastructure & Project Finance - Asia: Growth of Asia infrastructure companies will strengthen in 2021 but pace will vary](#), 22 March 2021
- » [Power - Asia-Pacific: 2021 outlook stable on stabilizing cash flows but regulatory difficulties remain](#), 9 December 2020
- » [Power – Asia: Asia's coal power producers face increasing risk of declining dispatch volume](#), 19 November 2020
- » [Infrastructure & project finance: Infrastructure in Emerging Markets: Focus on Vietnam](#), 6 February 2020

Compilations

- » [Inside ASEAN: 22nd Edition](#), 29 March 2021

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