

Foreign exchange reserves and green bonds

World Bank survey

- World Bank conducted surveys of foreign exchange reserve authorities
- 26% of foreign exchange reserve authorities are making ESG investments and 28% are considering such investments
- SDG bond investing is the mainstream, but some issues have been pointed out in terms of poor issuance amounts and liquidity
- We look for market expansion worldwide

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Green investments important even within foreign exchange reserves

According to IMF statistics, the world's foreign exchange reserves total \$12.6tn (≒ ¥1,700tn). Monetary authorities are huge investment entities and their actions are of great interest to bond markets. Also, in recent years the public nature of monetary authorities has also attracted attention in terms of their responses to climate change¹. Although not much data is publicly available due to its confidential nature, this report summarizes trends in green investment within foreign exchange reserves and their impacts on the sustainable finance market.

Results of World Bank survey

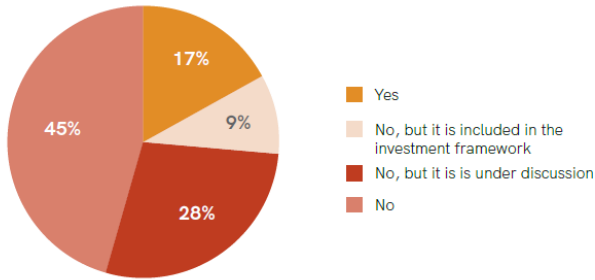
The World Bank [Treasury's RAMP](#) (Reserve Advisory and Management Partnership) released the results of its extensive [surveys](#) of foreign exchange reserve authorities. The most recent survey (2021) collected responses from 119 institutions worldwide and included ESG-related questions. First, in terms of ESG investment conditions, 26% of the surveyed monetary authorities indicated that they have already incorporated ESG into their investment activities. Furthermore, 28% said they are currently considering such investments, suggesting that ESG investments are expected to grow within foreign exchange reserve management as well. Meanwhile, 45% of these institutions said they have no plans to make ESG investments (Chart 1).

Many monetary authorities cited environmental and social impacts, as well as reputation, as a motivating factors for their ESG investments. As governments around the world strive to achieve carbon neutrality, their foreign exchange reserve authorities must set good precedents (lead by example) in the area of investment. Meanwhile, only 36% of the surveyed institutions cited economic aspects such as risk/return enhancement (Chart 2).

By region, 45% of monetary authorities in Southeast Asia and the Pacific region have embraced ESG investing, higher than the 40% in Europe and the Central Asia region (Chart 3). By asset size, 58% of institutions with \$50bn in assets are incorporating ESG factors, while only 36% of institutions with \$10-50bn, 3% with \$3-10bn, and 12% with less than \$3bn are doing so. In general, those monetary authorities with larger assets are more active in ESG investments (Chart 4).

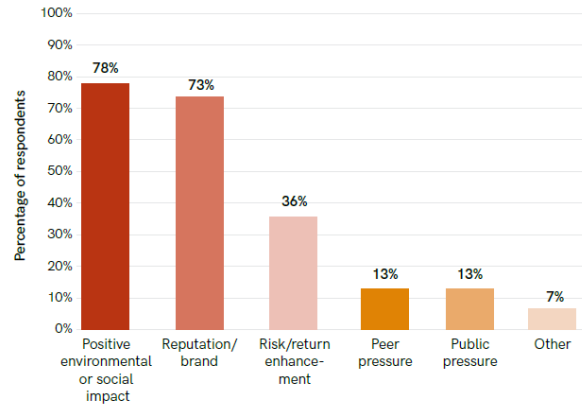
¹ For example, at the BIS-sponsored "Green Swan 2022 Conference," People's Bank of China Governor Yi Gang expressed his intention to apply ESG policies in foreign exchange reserve management and to expand the Bank's investment in green bonds.

Chart 1: Inclusion of ESG factors in Investment Policy



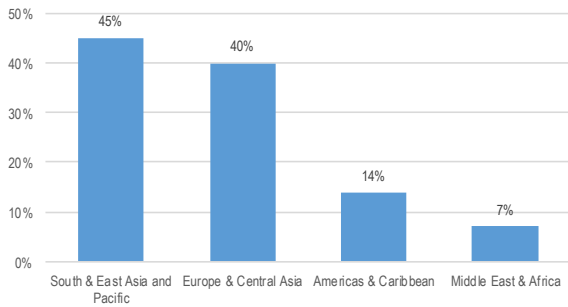
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Chart 2: Motivating Factors to Incorporate ESG



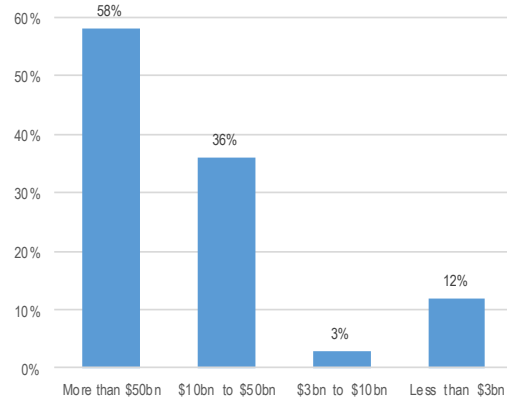
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Chart 3: ESG Investment by Region



Source: World Bank materials; Compiled by Daiwa.

Chart 4: ESG Investment by Asset Size



Source: World Bank materials; Compiled by Daiwa.

SDG bond investing mainstream, but issues with poor issuance amounts, liquidity

Regarding specific ESG investment methods, 68% of the survey respondents who had implemented ESG mentioned investing in sovereign/SSA-issued SDG bonds². Meanwhile, investment techniques such as positive screening and ESG integration are not widely used. This may have something to do with the difference in investment stances between ESG investment itself, which initially developed in the equity investment world, and foreign exchange reserves, which emphasize safety and liquidity above all else and so invest mainly in highly rated government bonds. According to the survey, among monetary authorities holding SDG bonds, only two had green bonds accounting for more than 10% of their portfolios. For 82% of the respondents, green bonds accounted for only 1% or less of their portfolios. Poor liquidity for highly rated public green bonds was also cited as a reason for not investing in ESG. As such, issuing SDG government bonds with good creditworthiness and liquidity is desirable.

² General term covering green, social, sustainability, and other such bonds. Also referred to as ESG bonds or ESS bonds.

Chart 5: ESG strategies used (percentage of institutions with ESG)

	Government/SSA bonds	Corporate bonds	High-yield bonds	Equity
Negative/exclusionary screening	32%	45%	10%	32%
Positive/best-in-class screening	16%	16%	0%	6%
ESG integration	23%	35%	10%	16%
Impact investing (i.e., green bonds, social bonds, sustainability bonds)	68%	35%	3%	Not applicable
Impact investing different from green, social, or sustainability bonds	6%	3%	0%	3%
Active ownership and engagement	3%	10%	3%	19%

Source: Reprinted from World Bank materials.

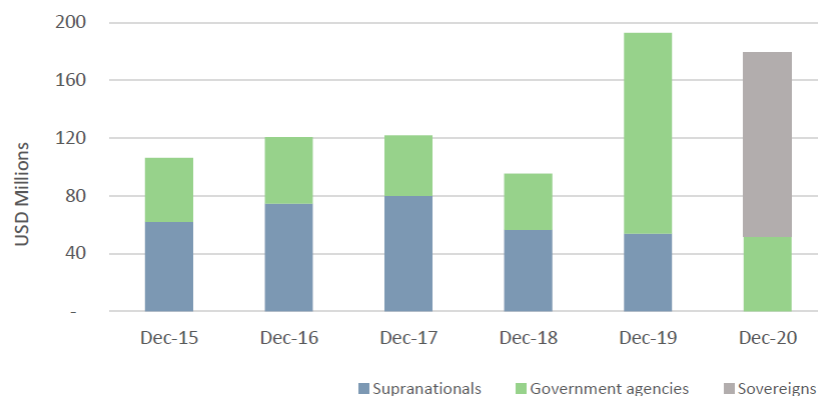
Central Bank of Brazil discloses green bond investment amount

The above section covered the overall survey conducted by the World Bank. In terms of individual central banks, we note that Brazil's central bank (Banco Central do Brasil) has disclosed its green bond investment amount. In its [Report on Social, Environmental and Climate-related Risks and Opportunities](#), the Bank disclosed the amount of green bond investment within its foreign exchange reserves investing. As of end-2019, the Bank had allocated \$195mn of its foreign exchange reserves for investing in green bonds, but that figure is less than 0.1% of its overall foreign exchange reserves (Chart 6).

BIS also launched a green bond fund

The Bank for International Settlements (BIS) manages BIS Investment Pools (BISIP) for the monetary authorities of various countries. BIS launched a green bond fund investing primarily in US dollar-denominated bonds in [2019](#), followed by a euro-denominated bond fund in [2021](#). In [February 2022](#), it launched a green bond fund focused on the Asian region. The total assets of these three funds have reached SDR3.4bn (≅ ¥600bn), accounting for 13% of all BISIP assets³. Furthermore, the [Executives' Meeting of East Asia-Pacific Central Banks](#) (EMEAP), spearheaded by the BOJ, manages the Asia Bond Fund (ABF) with the aim of fostering local currency bond markets in Asia. EMEAP revised the reference index to encourage green bond investments and the number of green bonds in its universe has been increased from two to 12.

Chart 6: Green Bonds in Foreign Reserves in Brazil



Source: Reprinted from Brazilian Central Bank materials.

Monetary authorities around the world do not provide very much information about how they invest their foreign exchange reserves as such information tends to be highly classified. Also, due to the nature of assets held for emergency forex market intervention, safety and liquidity are of paramount importance. As such, these funds are thought to be

³ [BIS Annual Report \(2021/22\)](#).

invested mainly in short/medium-term US Treasuries. Meanwhile, many governments are under increasing pressure to address climate change issues and have pledged to become carbon neutral. Accordingly, it is becoming increasingly important for the management of foreign exchange reserves to incorporate ESG factors, specifically green bond investments. The potential impact of the world's total foreign exchange reserves, which now exceed \$10tn, is significant. Various European countries, as well as the EU itself, have already started issuing green bonds⁴. In Japan, as well, Prime Minister Fumio Kishida, has announced the issuance of GX Economic Transition Bonds (tentative name)⁵. Both green government bond supply and demand are likely to increase.

⁴ Refer to our report [Green government bonds: Europe update and issues for Japan](#) by Shun Otani (ESG Update: 12 May 2022).

⁵ Refer to our report [GX economic transition bonds: From the standpoint of the structure, overseas examples, and sustainable finance trends](#) by Kouji Hamada, Shun Otani, and Kazuya Sato (DSTE461: 10 Jun 2022).

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