

# ANNEX H: JAPAN – DEVELOPMENT BANK OF JAPAN (DBJ)

#### H.I. BACKGROUND AND ESTABLISHMENT

The Development Bank of Japan (DBJ) was originally established in 1951 to provide finance to and support for the development of important domestic industries (coal, steel, etc.) as part of the post-war recovery. It also had a focus on providing long-term credit to infrastructure projects, particularly energy and power supply infrastructure, and promoting balanced interregional development. It was during this early period in the DBJ history that the portfolio was most concentrated in infrastructure.

During the 1970s, 80s and 90s, the DBJ became more concerned with sustainability objectives and its support was extended to new projects such as wind power projects and waste treatment facilities. Along with the deregulation of important utilities sectors, the DBJ began to apply modern project finance to support private investment in infrastructure.

In 1999, the existing DBJ and another development bank (Hokkaido-Tohoku DFPC) were combined to form a new Development Bank of Japan. The new DBJ was given a mandate to support community development, environmental conservation and sustainability, and technological and economic growth. After the financial crisis in 2008, the DBJ was dissolved and re-established again under the Development Bank of Japan Inc. Act. The Act is meant to provide for the eventual privatisation of DBJ – though this ambition has been stalled due to the global financial crisis and the Fukushima disaster. In 2015, legislation was passed that mandates the DBJ to utilise its investment and loan functions to take all possible measures to supply funds to deal with large-scale disasters and economic crises, to promote the supply of growth capital so as to revitalise regional economies, and to reinforce the competitiveness of enterprises.

DBJ continues to work toward the development and advancement of Japan's economy. It is supporting upgrades and improvements to social, transportation, and information infrastructure, and other essential utilities, but this is only a part of its overall activities, which are primarily focused on financing small businesses. 120

#### H.2. MANDATE

DBJ's mandate is to "conduct business activities utilizing the methods of integrated investment and loan services and other sophisticated financial methodologies, thereby contributing to the smooth supply of finance to those who need long-term funding, as well as to the sophistication of financial functions". <sup>121</sup>

### H.3. INSTITUTIONAL STRUCTURE

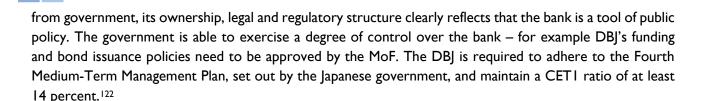
DBJ is wholly owned and regulated by the Japanese Ministry of Finance (MoF). The Development Bank of Japan Inc Act 2008 set an ambition to privatise the bank, but current government policy appears to have put these plans on hold due to concerns around wider economic conditions, the provision of long-term credit to small businesses, and the bank's crisis response objectives.

Although the DBJ has been set up to act commercially (for example, it earns additional income through arrangement, asset management, M&A and other advisory services) and to conduct operations at arms-length

<sup>120</sup> Development Bank of Japan. About DBJ/Timeline. [Online]. <a href="https://www.dbj.jp/en/ir/about/outline.html">https://www.dbj.jp/en/ir/about/outline.html</a>>.

<sup>121</sup> Development Bank of Japan. Annual Report & CSR Report. (July 2016) [Online].

<sup>&</sup>lt;a href="https://www.dbj.jp/en/pdf/CSR\_disclo/2016/about.pdf">https://www.dbj.jp/en/pdf/CSR\_disclo/2016/about.pdf</a>. In this context we interpret "sophistication" to mean innovation in the provision of financial products to meet the diverse capital needs of the market.



### H.4. GOVERNANCE STRUCTURE

The DBJ is governed by a Board of Directors who are appointed/dismissed by the MoF.<sup>123</sup> The Board is supported by audit and supervisory committees, in addition to an Advisory Board and a Special Investment Operations Monitoring Board comprising outside experts.

Other matters which require the authorisation of the finance minister include amendments to the DBJ Articles of Incorporation, disposition of surplus funds, mergers and corporate splits, and basic policy on business plans and fund procurement.

The Executive Committee (directors who are also appointed/dismissed by the MoF) manages day-to-day operations. The committee is supported by a range of decision-making and deliberative committees, including the Committee on Investment and Loan Decisions, the Advisory Panel on Investments and Loans, and the General Risk Management Committee. 124

### H.5. CAPITAL STRUCTURE AND SOURCES OF FINANCE

The DBJ has an 82:18 debt to equity capital structure. As of 2017, the bank had JPY 2.8 trillion (USD 25 billion) in equity and JPY 12.6 trillion (USD 113 billion) in debentures, borrowed money and corporate bonds. 125

The DBJ procures long-term funds through the issuance of corporate bonds and the Fiscal Investment and Loan Program (a type of Japanese government bond that provides long-term, low interest funds). The DBJ can issue both government guaranteed and non-guaranteed bonds. Over the last ten years, the DBJ has issued JPY 22.4 trillion (USD 20 billion) in non-guaranteed bonds, JPY 1.6 trillion (USD1.4 billion) in Yendenominated government-guaranteed bonds and a further USD 11.9 billion in government-guaranteed international bonds.

Over the last ten years, the DBJ has issued around 100 corporate bonds denominated in Japanese Yen for maturities between three and 30 years. Issue amounts typically range from JPY 10 to JPY 30 billion (USD 90 to USD 270 million), although in some instances the amount has been as large as JPY 60 billion (USD 540 million). Over the same period, it has issued around 70 Japanese government-guaranteed bonds. Maturities are typically shorter (between three and 10 years) but amounts raised are much larger (between JPY 20 to JPY 100 billion, or USD 60 to USD 900 million).

The DBJ has also issued so-called SRI bonds which are created to raise capital for new and existing projects with environmental and social benefits. They are exactly the same as DBJ's senior unsecured non-guaranteed

<sup>&</sup>lt;sup>122</sup> Development Bank of Japan. Fourth Medium-Term Management Plan. (May 2017). [Online].

<sup>&</sup>lt;a href="https://www.dbj.jp/en/pdf/ir/about/plan/plan4.pdf">https://www.dbj.jp/en/pdf/ir/about/plan/plan4.pdf</a>.

<sup>&</sup>lt;sup>123</sup> Eunomia. Comparative Study of National Infrastructure Financing Institutions. (June 2018). [Online].

<sup>&</sup>lt;a href="https://www.nic.org.uk/wp-content/uploads/Eunomia-NIC-FinalReport-Slide-Deck\_v1.0-050718.pdf">https://www.nic.org.uk/wp-content/uploads/Eunomia-NIC-FinalReport-Slide-Deck\_v1.0-050718.pdf</a>

<sup>124</sup> Development Bank of Japan. Annual Report & CSR Report. (July 2016). [Online].

<sup>&</sup>lt;a href="https://www.dbj.jp/en/pdf/CSR\_disclo/2016/about.pdf">https://www.dbj.jp/en/pdf/CSR\_disclo/2016/about.pdf</a>.

<sup>&</sup>lt;sup>125</sup> Development Bank of Japan. Annual Report. (July 2017). [Online]. < https://www.dbj.jp/en/pdf/CSR\_disclo/2017/02.pdf>



bonds but are subject to a formal internal process that is linked to DBJ's lending operations. To date, the DBJ has issued four SRI bonds, raising between EUR 250 million and USD I billion at three to five-year maturities.

DBJ's capital plan for 2018 involves issuing an estimated JPY 2.47 trillion (USD 22 billion) in corporate bonds, including approximately JPY 350 billion (USD 3.1 billion) in Japanese government-guaranteed bonds.

Because of the strong support provided by the Japanese government, DBJ currently has an 'upper-medium' credit rating: AI (Moody's), A+ (S&P), AA (R&I), AAA (JCR). Moody's gives the same rating to DBJ's government-guaranteed bonds as its corporate bonds, but S&P rates its corporate bonds one notch below (A).

## H.6. FINANCING ACTIVITIES

The DBJ offers equity, debt and guarantee products. It also provides advisory services. <sup>126</sup> It usually acts as a lead arranger in putting together project finance packages, alongside offering senior and mezzanine loans. Over time, the DBJ has built up significant experience in energy and infrastructure projects. Projects supported to date include:

- Japan Wind Development Fund. The DBJ launched a new fund jointly established with Japan Wind Development Co to invest in wind power projects in Japan. As at March 2017, the fund had acquired 15 wind farms across the country. A group of Japanese lenders recently closed a JPY 24 billion (USD 216 million) project finance facility which was used to refinance the loan provided by the DBJ to acquire wind assets.<sup>127</sup>
- Haneda Airport International Passenger Terminal. The expansion of Haneda Airport's international passenger terminal was undertaken as a private finance initiative (PFI) project. DBJ, in collaboration with Mizuho and Mitsubishi UFJ, acted as the lead arranger of the project finance. 128
- Fukuoka Clean Energy Corporation. This project involved was developed by a jointly financed special purpose company, formed by the City of Fukuoka and Kyushu Electric Power Co, to build a waste processing facility using a PFI approach. Under the sponsor agreements, the facility will incinerate general waste generated in the city of Fukuoka over a 25-year period, generating electricity from the heat energy of incineration and selling any surplus energy to Kyushu Electric. The DBJ structured the arrangement involving a direct agreement between the City of Fukuoka and Kyushu Electric and a banking syndicate, which provided that the financing will be repaid through fees received from the City of Fukuoka for processing waste and through income from the sale of electricity to Kyushu Electric. 129

<sup>&</sup>lt;sup>126</sup> Eunomia. Comparative Study of National Infrastructure Financing Institutions. (June 2018). [Online].

<sup>&</sup>lt;a href="https://www.nic.org.uk/wp-content/uploads/Eunomia-NIC-FinalReport-Slide-Deck\_v1.0-050718.pdf">https://www.nic.org.uk/wp-content/uploads/Eunomia-NIC-FinalReport-Slide-Deck\_v1.0-050718.pdf</a>

<sup>&</sup>lt;sup>127</sup> Development Bank of Japan (March 2017) "The arrangement of Japan's largest wind power project finance" [Online].

<sup>&</sup>lt;a href="https://www.dbj.jp/en/topics/dbj">https://www.dbj.jp/en/topics/dbj</a> news/2016/files/0000026501\_file1.pdf>

<sup>&</sup>lt;sup>128</sup> Development Bank of Japan. Case Study: Haneda Airport International Passenger Terminal PFI. [Online].

<sup>&</sup>lt;a href="https://www.dbj.jp/en/solution/social/public/haneda\_pfi.html">https://www.dbj.jp/en/solution/social/public/haneda\_pfi.html</a>

<sup>129</sup> Development Bank of Japan. Case Study: Fukuoka Clean Energy Corporation. [Online].

<sup>&</sup>lt;a href="https://www.dbj.jp/en/solution/social/resources/c\_ennagy.html">https://www.dbj.jp/en/solution/social/resources/c\_ennagy.html</a>



# H.7. PROJECT PREPARATION AND TECHNICAL ASSISTANCE ACTIVITIES

The DBJ does not have a role in supporting the development of a national pipeline of projects. However, it does take the lead arranger role in some financings, which means that it has a role in structuring the project.

#### H.8. PERFORMANCE MONITORING

The DBJ has internal risk management and credit analysis functions which assess and monitor client creditworthiness. It also performs a comprehensive analysis of data based on borrower ratings and calculates the loan portfolio's overall exposure to credit risk. 130

#### H.9. KEY LESSONS LEARNED

Three notable lessons from the DBJ experience are around the sharing of risk:

- Unlike NIBs in a traditional emerging markets context, the DBJ has been able to adopt a 'market making' approach by, for example, undertaking primary financings which are subsequently refinanced once the asset is operational. In this way, the DBJ finances the riskier construction phase of the project but enables transfer of risk to the private sector at a later stage.
- The DBJ has tried to avoid crowding-out private capital by focusing on higher value-added (but also higher risk) services where there are gaps in the market, such as structured financing and mezzanine financing.
- Where the DBJ raises funding from the capital markets through non-government guaranteed bonds, it implicitly transfers some risk to the private sector.

<sup>&</sup>lt;sup>130</sup> Development Bank of Japan. Annual Report & CSR Report. (July 2016). [Online].

<sup>&</sup>lt;a href="https://www.dbj.jp/en/pdf/CSR\_disclo/2016/about.pdf">https://www.dbj.jp/en/pdf/CSR\_disclo/2016/about.pdf</a>.