



# Progress in Data Integration and Next Steps

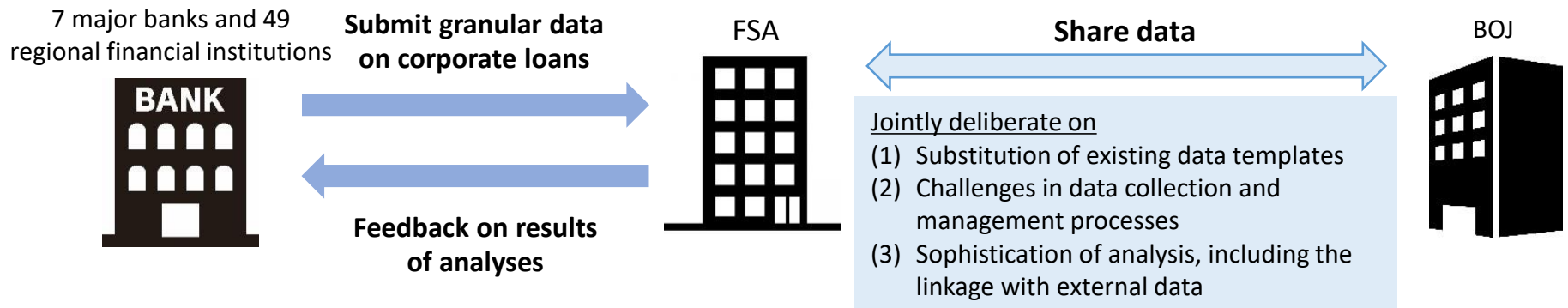
June 2023

Financial Services Agency and Bank of Japan

(English translation released in July 2023)

- The FSA and the BOJ have taken the following initiatives toward data integration with a view to **further enhancing their monitoring capabilities and reducing the burden on financial institutions**.
  - Improving efficiency of the existing data collection process by **integrating and abolishing data templates and unifying submission destinations**.
  - Deliberating on a more effective and efficient framework for data collection and management (**common data platform**).
- The two entities have **reduced the burden on financial institutions** through integration and abolition of data templates as well as unification of submission destinations, with the exception of those for which the implementation is difficult due to statistical reasons or system specifications, taking account of requests from the financial industry.
- With regard to the common data platform, a survey on overseas developments was conducted in fiscal 2021. In fiscal 2022, the FSA and the BOJ coordinated to conduct a joint experiment to collect transaction-level corporate loan data from some financial institutions.
  - According to the survey, many countries are collecting granular data while promoting standardization of data definitions and formats for financial supervision and monetary policy (see Appendixes 1 and 2 for more details).

## <Overview of the experiment>





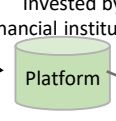




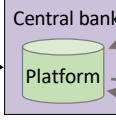
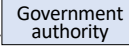



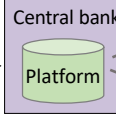
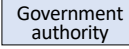
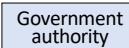


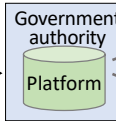
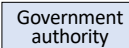
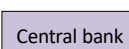

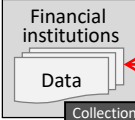
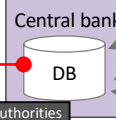

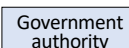
- Based on the results of the experiment, the aggregation of granular data will **possibly substitute for some existing data templates**, and **granular data have great potential to further enhance their monitoring and analytical capabilities**.
- On the other hand, it also turned out that data collection and management **require a considerable amount of time and resources**, both on the side of financial institutions and at the FSA and the BOJ in terms of organizing their operations.

### Details and results of the experiment

	Issues	Results
<b>(1) Substitution of existing data templates</b>	<ul style="list-style-type: none"> <li>• Whether the substitution of the existing data templates is possible by comparing the aggregated values of granular data with the values of individual items in the existing data templates submitted by banks</li> </ul>	<ul style="list-style-type: none"> <li>• It was assessed that some data templates can be substituted if (1) definitions of data items are further clarified and adjusted and (2) additional items are submitted.</li> </ul>
<b>(2) Challenges in data collection and management processes</b>	<ul style="list-style-type: none"> <li>• Delivery of the granular data (from financial institutions to the FSA and the BOJ)</li> <li>• Cleansing, normalization, and storage of submitted data</li> </ul>	<ul style="list-style-type: none"> <li>• Challenges related to data management at financial institutions and data cleansing/management/sharing at the FSA and the BOJ were identified.</li> </ul>
<b>(3) Sophistication of monitoring and analysis</b>	<ul style="list-style-type: none"> <li>• Assignment of Corporate Numbers at the FSA after receiving borrower information from banks</li> <li>• Deliberation on sophistication of monitoring and analysis by making use of the characteristics of granular data</li> </ul>	<ul style="list-style-type: none"> <li>• Corporate Numbers were assigned to more than 90% of financial institutions' client firms both in terms of number and their loans outstanding.</li> <li>• Climate-related risks were analyzed by linking them with individual firm data and geographic data.</li> <li>• It was confirmed that granular data have great potential for use in monitoring and analysis.</li> </ul>

- Based on the results of the experiment, the FSA and the BOJ will closely communicate and coordinate with financial institutions to **standardize data definitions and formats and establish operations of data collection**. Moreover, they will consider **expanding the coverage of banks subject to data submission**.
- The two entities will start to collect granular data on corporate loans in a phased manner from the second half of fiscal 2023. They will conduct **more detailed monitoring and analysis by obtaining financial institutions' transaction-level granular data** as well as promote dialogue to identify risks in the financial system and encourage financial institutions to support their client firms. They will also **abolish existing data templates that can be substituted with granular data to reduce the burden on financial institutions**.
- The environment surrounding Japan's financial system is changing significantly, reflecting the rise in foreign interest rates and bank failures abroad. Given these changes, the FSA and the BOJ will **continue to make steady progress with necessary data collection and management from a medium-term perspective, including improving the quality of data**, with a view to conducting more comprehensive and accurate monitoring and analysis. Through these initiatives, they will encourage financial institutions to **further sophisticate their data governance and risk management**.

- The survey, conducted in 2021, showed that foreign authorities have taken unique initiatives as follows.
  - ✓ **Unification of reporting channels** with financial institutions and **sharing of collected data among several monetary authorities** <sup>1</sup>
  - ✓ **Standardization** of the format for data collection and **avoidance of data overlap among authorities** <sup>2</sup>
  - ✓ **Collection of pre-aggregated granular data (loan-level data, etc.)** <sup>3</sup>

Country	1	Flow of data	Overview	2	Standardization, etc.	3	Granular data
 Austria		Invested by financial institutions 	  Central bank	Financial institutions submit data to a platform (AuRep) established through joint investment; AuRep undertakes regulatory reporting to the central bank, etc.	Public and private sectors designed the data model for AuRep (Basic Cube).	✓	Transaction-level data are submitted to AuRep.
 Italy			 	A single data platform developed by the central bank.	Established a single data dictionary (PUMA) to report to the authorities.	✓	
 Canada			 	A single data platform jointly established and used by three authorities (operated by the central bank).	The definitions of collected data are provided by the respective authorities (however, the three authorities coordinate to avoid data overlap).	✓	
 Australia			 	A data platform developed by the Australian Prudential Regulation Authority (APRA).	The authority of data collection is concentrated in the APRA (in addition, the authorities coordinate to avoid data overlap).	✓	
 Rwanda			 	Financial institutions submit data by automatically converting data taken from their own transaction databases into the data format designated by the authorities (data pull approach).	The authorities provide a data dictionary, etc. and standardize financial institutions' data reporting system.	✓	Data by account and borrower are requested.

Note: Countries that are taking unique initiatives are listed.

Source: KPMG AZSA LLC, "Basic survey report for the establishment of a common data platform in Japan (December 2021)" (available only in Japanese).

## Federal Reserve

- Reporting agents: bank holding companies, intermediate holding companies, and savings and loan holding companies (those with total consolidated assets of \$100 billion or more)
- Start of data collection: 2011
- Scope of data: <quarterly> detailed data on various asset classes, capital components, and categories of pre-provision net revenue (including data on corporate loans and leases with a committed balance greater than or equal to \$1 million)  
<monthly> detailed data on credit card and home equity loans

### Purpose of data collection

- Supporting supervisory stress test models, continuous monitoring efforts, etc.

## ECB

- Reporting agents: credit institutions resident in a euro area Member State and foreign branches of credit institutions, provided that these branches are resident in a euro area Member State (the relevant national central bank may grant derogations to small reporting agents)
- Start of data collection: 2018
- Scope of data: <monthly> loan-by-loan data on corporate loans (subject to reporting if a debtor's commitment amount for all eligible instruments equals or exceeds €25,000)

### Purpose of data collection

- Financial stability surveillance, monetary policy analysis and operations, etc.