Report on the Follow-up Survey on Fintech-based Services

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公正取引委員会
Japan Fair Trade Commission

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Chapter 1: Purpose of the Survey

An increasing number of companies that take advantage of *fintech**[1] (hereinafter “fintech companies”) have entered the financial sector, where services have traditionally been provided mainly by banks. This has given rise to new financial services such as household accounting services for individuals[2], accounting services for small- and medium-sized enterprises (SMEs) and sole proprietors, and QR and other code-based cashless payments[3], thereby improving user convenience. Some of the key roles expected of the Japan Fair Trade Commission (JFTC), which is in charge of implementing competition policy, are stimulating competition among businesses with news entrants that make good use of the new technology, encouraging innovation, including the creation of new services, and ensuring an enabling environment that enhances user convenience. To identify challenges for competition policy in the cashless sector, the JFTC has conducted two fact-finding surveys in this sector. Their results were published in April 2020 in two reports entitled "Survey on Household Accounting Services" (hereinafter the "Report on Household Accounting Services") and "Survey on Cashless Payments with QR Code and Barcode" (hereinafter the "Code Payments Report"). These two surveys and reports are collectively referred to as the “previous surveys” and the "previous reports," respectively.

The JFTC believes that since the publication of the previous reports, user convenience has been improved in terms of bank access for electronic payment service providers (EPSPs) and transaction practices related to interbank fees, mainly due to the efforts of stakeholders. This time, the JFTC conducted this follow-up survey to further improve the competitive environment in the field of fintech-based services, thereby encouraging innovation and enhancing user convenience.

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[1] *Fintech*, a portmanteau of *finance* and *technology*, refers to new financial services created by combining information technology with financial services.

[2] While the services are sometimes called asset management services, in this survey they are referred to as household accounting services.

[3] *Cashless payment* refers to the act of settling accounts (i.e., the act of dissolving the debtor-creditor relationship between parties through the transfer of monetary value, most notably funds) by means other than physical cash (banknotes and coins).

Chapter 2: Target and Method of the Survey

1. Target of the Survey

The previous surveys made five recommendations. The Report on Household Accounting Services made the following:

Recommendation 1: Secure EPSPs access to banks

The Code Payments Report made the following:

Recommendation 2: Set appropriate retail payment infrastructure fees and use read-write APIs
Recommendation 3: Review transaction practices in relation to interbank fees
Recommendation 4: Strengthen the governance structure of Zengin-Net and ensure transparency of transactions
Recommendation 5: Explore ways to open up access to the fund payment system to fund transfer service providers (FTSPs)

This survey examined the following issues in light of each of these five recommendations made in the previous surveys. It also identifies and assesses any challenges for competition policy.

Recommendations made by the previous surveys		Issues examined in this survey
Report on Household Accounting Services	Recommendation 1: Secure EPSPs access to banks	Status of transactions between banks and EPSPs in relation to account information acquisition
Code Payments Report	Recommendation 2: Set appropriate retail payment infrastructure fees and use read-write APIs	Whether changes in retail payment infrastructure fees have led to changes in the costs that non-bank code payment providers pay to banks
	Recommendation 3: Review transaction practices in relation to interbank fees	Whether the review of transaction practices in relation to interbank fees has led to changes in transfer fees
	Recommendation 4: Strengthen the governance structure of Zengin-Net and ensure transparency of transactions	Progress in exploring ways to strengthen the governance structure of Zengin-Net and ensure transparency of transactions
	Recommendation 5: Explore ways to open up access to the fund payment system to fund transfer service providers (FTSPs)	Progress in exploring ways to open up access to the Zengin System to FTSPs

2. Method of the Survey

The survey was conducted from March 2022 to February 2023 by the following method:

(1) Paper-based survey

A. EPSPs[4] 102 providers[5] (of which 50 responded)

B. FTSPs[6] 83 providers [7] (of which 46 responded)

[4] *Electronic payment service providers* as defined in Article 2, paragraph (18) of the Banking Act (Act No. of 59 of 1981).

[5] These were registered as EPSPs as of the start of the paper-based survey (April 14, 2022).

[6] *Funds transfer service providers* as defined in Article 2, paragraph (3) of the Payment Services Act (Act No. of 59 of 2009).

[7] These were registered as FTSPs as of the start of the paper-based survey (April 14, 2022).

	C.	Banks[8]	134 banks[9] (of which 120 responded)

(2) Interview survey

A.	EPSPs	7 providers
B.	FTSPs	5 providers
C.	Banks	12 banks
D.	Industry associations	4 associations
E.	Retail payment infrastructure providers	5 providers
F.	Experts	3 experts
G.	Authorities and industry associations in other countries	6 organizations

[8] This survey covered Japanese banks only.

[9] These were licensed as banks as of the start of the paper-based survey (April 14, 2022).

Chapter 3: Status of Transactions in Household and Other Accounting Services

As the JFTC's consideration in light of competition policies with respect to transactions between banks and EPSPs, the Report on Household Accounting Services made the following statements: "it is necessary to adequately secure access to information on savings accounts currently kept by banks," and "it is desirable that banks will expand, on an as-needed basis, the scope of information acquired with the API connection by taking into consideration needs of users and burden of costs." (Recommendation 1, mentioned earlier in Chapter 2, Section 1). The purpose of this chapter is therefore to assess whether appropriate access to information on savings accounts is ensured for EPSPs to provide household and other accounting services (see Section 1, (1), below). To this end, the chapter describes how transactions between EPSPs and banks regarding the acquisition of account information have developed since the previous surveys. In light of such a state of transactions, it also suggests guidelines in terms of the Antimonopoly Act and competition policy.

1. Overview, etc. of Household and Other Accounting Services

(1) Overview of household and other accounting services

Household accounting services for individuals have a variety of their own characteristics, as do business accounting services for SMEs and sole proprietors. Yet these two types of services share one salient feature: users follow the same procedure to use the services. They download and install a dedicated app on their smartphone or tablet, etc. and register their savings account and credit card numbers with the app. The app then automatically records various pieces of information, such as deposits and withdrawals to and from their savings account, as well as credit card transactions. This allows users to check these records in one place. In this way, these two types of services are no different in that they are based on account information obtained from banks, although they have different customer bases. For this reason, they are collectively referred to in this survey as "household accounting services."

It should be added that banks may also use the account information thus acquired by household accounting service providers, as well as information generated using such data, for their lending and other business activities.

(2) Household accounting services

A household accounting service refers to a service that uses a dedicated app installed on the user's smartphone or tablet that automatically records the balances on the user's various savings accounts, credit cards, and the like.

In this survey, three companies[10] registered as EPSPs indicated that they offer household accounting services. Although the exact number of users who have registered their savings accounts is not available,[11] the total number of users in the market for household accounting services is likely to be increasing, as listed companies offering such services report that their customers base is growing.

Since the previous surveys, there have been reported cases of banks providing household accounting services alone or in cooperation with EPSPs (see Section 2, subsection (1), A below).

(3) Business accounting services

A business accounting service refers to the service of helping SMEs and sole proprietors with accountancy and tax returns. It is similar to a household accounting service in basic features; by using information on savings accounts of SMEs, etc., it automatically journalizes deposits to and withdrawals from such accounts and prepares financial statements.

Data on such deposits and withdrawals can be used by banks for loan procedures. The use of such data obviates the need for SMEs applying for a loan from a bank to provide financial documentation that is otherwise

[10] The number is based on responses to the paper-based and interview surveys. This number was five in the previous surveys.

[11] In previous surveys, the number was around five million, based on responses to the paper-based survey.

required by the bank, thereby reducing the time needed for loan procedures.

In this survey, nine companies[12] registered as EPSPs indicated that they provide business accounting services. Although the exact number of users who have registered their savings accounts is not available,[13] the total number of users in the market for business accounting services is likely to be increasing, as listed companies offering such services report that the number of their customers is growing.

2. Status of Transactions between Banks and EPSPs in Relation to Account Information Acquisition

(1) Account information reading contracts with banks

A. The amendment to the Banking Act

Providers of household accounting services have traditionally offered such services to the users of Internet Banking (IB) services.[14] To acquire account information for IB services, they have used the method known as “screen scraping,” whereby they obtain passwords or other credentials for IB services from users and access the core banking system[15] on their behalf. Until May 31, 2018, they were not required by law to register; they were free to do business.

[12] The figure is based on responses to the paper-based and interview surveys. Two of these companies also provide household accounting services. This number was six in the previous surveys.

[13] In previous surveys, the number was around 0.5 million, based on responses to the paper-based survey.

[14] An IB service is a service that allows users of banks that have implemented an IB system to log on to the Internet from their terminals, such as personal computers and smartphones, and access their financial institution’s systems to check their account balances and initiate funds transfers, among other transactions, after signing up for such a service. Such a service is offered separately for personal and business accounts.

[15] Account information held by banks is managed by the core banking system that processes deposits, loans, transfers, and other operations at banks. Therefore, to acquire account information, it is necessary to access the core banking system (For core banking systems, see the Report on Household Accounting Services, Chapter 2 Section 3, (2).).

The situation changed after the implementation of the 2017 amendment to the Banking Act[16] (hereinafter the"Amendment of the Banking Act"), which aims to create an institutional framework to promote open innovation (innovation through cooperation and collaboration) in cooperation with fintech companies – including providers of household accounting services – while protecting users. The act provides that the providers of household accounting services that intend to acquire account information upon the request of bank account holders must be registered as EPSPs and enter into an electronic payment services (hereinafter, the "Account Information Reading Contract") with banks by May 31, 2020.[17] The act also stipulates that banks must attempt to make arrangements to enable EPSPs to acquire account information without resorting to screen scraping.[18] As a result, the technology known as API[19] is now generally used by EPSPs to obtain account information.[20]

In terms of functionality, APIs are divided into two types: *read-write APIs* for updating account information such as funds transfer data, and *read-only APIs* for reading account information such as balances. Read-only APIs are primarily needed for EPSPs to provide household accounting services.

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[16] The Act Partially Amending the Banking Act and Other Acts (Act No. of 49 of 2017).

[17] On April 14, 2020, the Financial Services Agency announced that it would extend the deadline to September 30, 2020 for those contracts that could not be signed by May 31, 2020 due to the impact of COVID-19, although both parties – banks and EPSPs – had expressed their intention to sign them by that date. (https://warp.ndl.go.jp/info:ndljp/pid/11511167/www.fsa.go.jp/en/ordinary/coronavirus202001/press_20200422.html)

[18] Article 11 of the Supplementary Provisions of the Amendment of the Banking Act.

[19] Application Programming Interface. API refers to a connection method for the secure use of the functions and data of other systems (Hereinafter, the act of connecting to a banking system via an API is referred to as "API connection," while an API that is opened to other entities so that they can make such a connection is referred to as an "open API.").

[20] Screen scraping can extract any information that can be read with IB services. In the past, it was sometimes possible to extract data on ordinary savings accounts, foreign currency saving accounts, investment trust accounts, and the like. Now, it is up to each bank to decide what data to make available. The Banking Act does not specify the scope of data that should be acquired via an API connection.

B. Account information reading contracts with banks

According to the Banking Act, in order to acquire account information held by a bank, EPSPs must enter into an electronic payment service contract with the bank.[21]

The Report on Household Accounting Services states in Chapter 4, Section 1 (1): “[I]t is expected ... that the access to information on savings accounts in the household accounting services is secured through contracts between banks and electronic payment service providers under the Banking Act.”

In this regard, the JFTC asked EPSPs that provide household and other accounting services about the progress in concluding an account information reading contract with banks with which they had negotiated. The results are shown in Figure 1.

[21] Article 52-61-10, paragraph (2) of the Banking Act provides that such a contract must set forth the following particulars:

(i) Particulars concerning the sharing of liability between the bank and the EPSP for any loss or damage caused to a user in connection with electronic payment services

(ii) Particulars concerning measures to be implemented by the EPSP for proper handling and security management of users' information acquired in connection with the services and measures that may be implemented by the bank when the EPSP fails to implement the above measures.

Figure 1: Progress in concluding account information reading contracts with banks with which EPSPs have negotiated

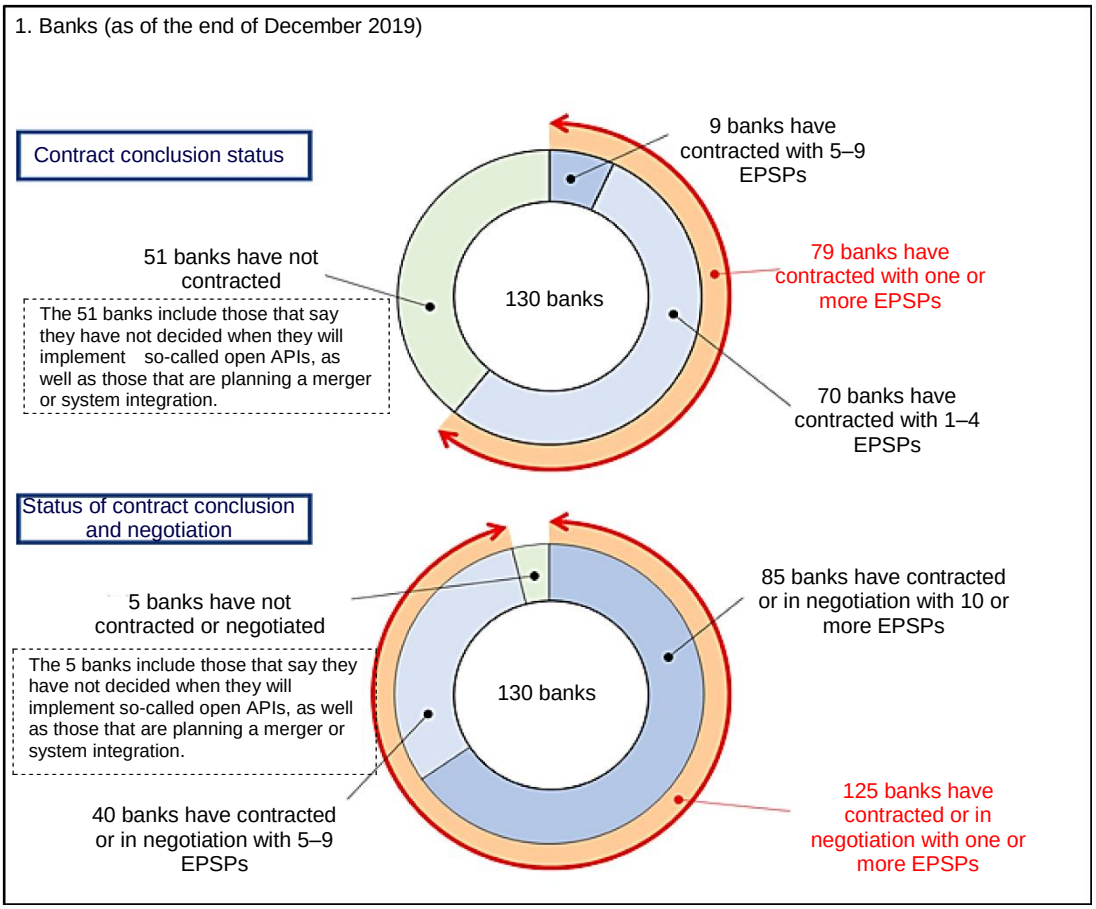
Answer	Number of EPSPs[22]
Have contracted with all negotiated banks (100%)	4 (40.0%)
Have contracted with most of the banks with which we negotiated (80% or more)	5 (50.0%)
Have contracted with more than half or more of the banks with which we negotiated (50% or more)	1 (10.0%)
Have not contracted with most of the banks with which we negotiated (less than 50%)	0 (0.0%)
Have not contracted with any of the banks with which we negotiated	0 (0.0%)
Number of respondents	10

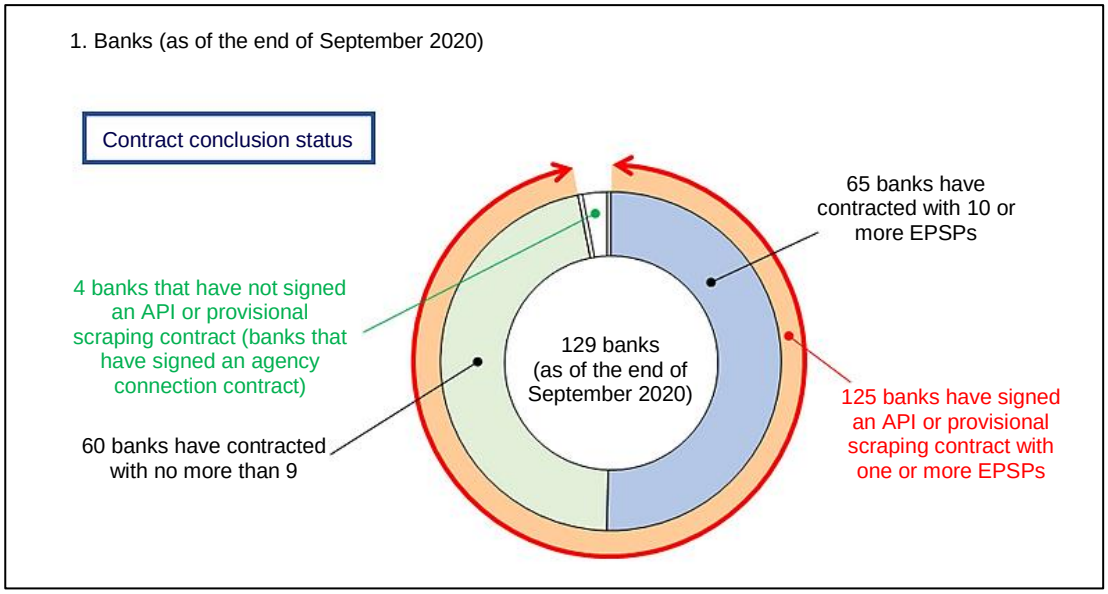
Source: Compiled by the JFTC from the responses to the paper-based survey (of EPSPs)

On March 31, 2021, the Financial Services Agency announced the "publication of an ongoing status report on the conclusion of contracts between financial institutions and electronic payment service providers (electronic settlement agents) [in Japanese]." This report indicates that from the end of December 2019 to the end of September 2020, some progress was made in the conclusion of account information reading contracts between banks and EPSPs. During this period, the number of banks with contracts with one or more EPSPs increased from 79 to 125. By the end of September 2020, more than half of the banks had signed such a contract with ten or more EPSPs.

[22] Because the percentages in parentheses are rounded off to the first decimal place, the sum of these figures may not equal to 100%. The same applies below.

Figure 2: Progress in conclusion of contracts between banks and EPSPs (March 31, 2021)





Source: Translated by the JFTC from the Financial Services Agency, “Publication of an ongoing status report of the conclusion of contracts between financial institutions and electronic payment service providers (electronic settlement agents) [in Japanese]” (accessible on its website)

(2) Terms of account information reading contracts with banks

As described in footnote21 to Section 2, (1), B, the Banking Act stipulates that any account information reading contract between a bank and an EPSP must specify such matters as the division of liability between the two parties and the proper handling of information. Other details should also be agreed upon in negotiations between the two parties.[23]

A. Terms of account information reading contracts with banks

The paper-based survey of EPSPs and banks shows that account information reading contracts between EPSPs and banks are often renewed annually.

The JFTC asked banks about the duration and renewal frequency of account information reading contracts. Excerpts from their responses are provided below:[24]

<Duration and renewal frequency of account information reading contracts>

(Banks)

- We sign one-year contracts so that we have the flexibility to respond to changes in the economic and external environment. They are automatically renewed unless the EPSPs request changes to contract terms.

[23] In order to reduce the administrative burden associated with contract negotiations between banks and EPSPs, the Japanese Bankers Association has developed and publicized “Sample Clauses for API Use Agreements pursuant to the Banking Act” as a reference for contact negotiations. The Sample Clauses do not cover read-only API connection fees, which are to be determined in negotiations between banks and EPSPs. In addition, the Center for Financial Industry Information Systems (FISC) has compiled and published the “API Connection Checklist.” (For details, see Chapter 2, Section 4, (2), C of the Report on Household Accounting Services).

[24] The open-ended responses in the paper-based survey and interview responses in this survey contain very specific information. These responses have been abstracted where quoting them verbatim would risk identifying respondent companies. They have also been edited to standardize expressions throughout. The same applies below.

- We sign one-year contracts with EPSPs because we typically conclude one-year contracts with corporate entities. However, contract terms are subject to negotiation as needed, even during the term of the contract.
- We sign one-year contracts with EPSPs. We review EPSPs annually to confirm the security of their connections. To facilitate consultation with EPSPs if such a review identifies a problem, we limit the contract term to one year.

Read-only API connection fees that banks receive from EPSPs can be divided into *initial costs* and *ongoing costs*. The JFTC asked banks, EPSPs, and industry associations about the breakdown of read-only API connection fees – what elements are included in *initial costs* and *ongoing costs*. Excerpts from their responses are provided below:

<Breakdown of read-only API connection fees>

(Banks)

- We charge initial fee and a monthly fee for read-only API connections to EPSPs. The initial fee includes connection testing costs and API connection infrastructure development costs. The monthly fee includes ongoing costs such as telecommunications line costs that we incur.
- Initial costs also include system development and setup costs associated with read-only API connections, but do not include labor costs.
- We consider read-only API connection fees to be compensation for the services we provide to EPSPs. Based on this recognition, we consider the initial costs to be a service launch fee. Similarly, we view the pay-as-you-go cost as compensation for access to our system via a read-only API connection.

(EPSPs)

- We believe that initial costs of read-only API connection fees consists of some or all of the amount that banks pay to system vendors that provide

read-only API connection infrastructure, including the creation of a connection testing environment necessary for actual connections. Some banks have arranged for the connection testing periods of different EPSPs to coincide in order to allocate the amounts these banks pay to system vendors among the EPSPs involved.

(Industry associations)

- Initial costs associated with bank screening and network connectivity testing are too high for small businesses seeking a new connection. We believe they are a barrier to new entrants.

Meanwhile, some banks do not charge any fees for read-only API connection.[25] The JFTC asked such banks why they provide read-only API connections free of charge. Excerpts from their responses are provided below:

<Why some banks do not charge read-only API connection>

(Banks)

- We are a late entrant and have only recently started operations. We cannot attract customers just by offering the same services as other banks. Offering free read-only API connection fees is part of our strategy to attract users. Another reason is that we can keep API connection costs low because we have developed a system that is designed to accommodate API connections.

- From the beginning, we did not intend to charge for read-only API connections. Also, some EPSPs have asked us to offer read-only API connections for free.

[25] As discussed in Chapter 5, some governments are requiring banks to provide data free of charge to facilitate the new entry of fintech companies. The Japanese government plans to "take necessary measures to address the challenges identified to achieve data portability and open APIs" as part of its efforts to "concentrated investment and implementation of digitalization as a new growth driver and its environment," as described in the *Growth Strategy Follow-up Process Chart*, which was approved by the Cabinet on June 18, 2021.

- We are positive about digitalization based on open APIs. We thus welcome business proposals from EPSPs. We intend to act on such suggestions if they meet our business needs. If such proposals are commercially viable for us, we may not need to charge read-only API connection fees to the EPSPs that made them.

- We do not charge read-only API connection fees because we want to encourage open innovation. Charging such fees would be costly to begin with; it would incur large legal and negotiation costs while generating little revenue. Given these costs, as well as the benefits of working with EPSPs, we felt it was better not to charge for read-only API connection.

- We do not charge for read-only API connections, in order to work more closely with EPSPs for greater convenience and better services to users.

Other banks discount connection fees for certain EPSPs. The JFTC asked these banks why they discount read-only API connection fees for certain EPSPs. Excerpts from their responses are provided below:

<Why some banks discount read-only API connection fees for certain EPSPs>

(Banks)

- We may discount read-only API connection fees for partner EPSPs that place our advertisements on their apps.

- We charge some EPSPs discounted connection fees because they were early adopters when we launched services that required the use of read-only APIs.

- We first explain to EPSPs the specific breakdown of connection fees and then show them the standard fees as an example. At the same time, we tell them that we can reduce the fees for possible business collaboration with them. Then we show possible discount levels based on the prospects of such collaboration in negotiations.

- We do not charge setup and other costs to EPSPs who argue that because other banks pay for read-only API connections, they cannot pay only us. Banks are not always in a better negotiating position than EPSPs.

- We negotiate with EPSPs to set the fees for read-only API connections. Some EPSPs have asked for free read-only API connections. We have negotiated a paid connection with them, but to no avail.

B. Status of renegotiations on the terms of account information reading contracts with banks

As discussed in A, account information reading contracts between banks and EPSPs are often subject to annual renewal. They are also often subject to consultation if either party has doubts about the terms of the contract. In addition, the Report on Household Accounting Services states in Chapter 3, Section 3: “[T]he interview surveys of electronic payment service providers found that some providers were suggested by many banks that the current terms were provisional ones premised on the above time limit [the end of May 2020 as prescribed in the Amendment of the Banking Act], and that the contents of the contracts might be reviewed in negotiations for contract renewal.”

The JFTC asked EPSPs whether they had renegotiated the terms of account information reading contracts with banks. The results are shown in Figure 3.

Figure 3: Whether EPSPs have ever renegotiated the terms of account information reading contracts with banks

Answer	Number of EPSPs
Have renegotiated	7 (70.0%)
Have no renegotiated	3 (30.0%)
Number of respondents	10

Source: Compiled by the JFTC from the responses to the paper-based survey (of EPSPs)

The JFTC also asked both EPSPs and banks why they renegotiated the contract terms. Excerpts from their responses are provided below:

<Why some EPSPs and banks renegotiated the contract terms>

(EPSPs)

- As the deadline for signing such contracts set by the Amendment of the Banking Act was approaching, some banks provisionally accepted our request for connection for a small fee, on condition that the contract terms would be reviewed.
- Bank contacts change quickly. Some of them ask for renegotiation of contract terms without taking into account the concept of Open Banking as required by the amended Banking Act.
- Many banks cite increased numbers of accesses and higher payments to system vendors as reasons for requesting renegotiations of contract terms, among many others. These banks are often regional banks. Since our main clients are SMEs and sole proprietors, it is important for us to conclude such a contract with the largest bank in the region.

(Banks)

- We signed a provisional account information reading contract with some EPSPs before agreeing on detailed financial terms, as the deadline set by the amended Banking Act was approaching. We often had to accept the terms of such provisional contracts demanded by EPSPs. We now regularly renegotiate such terms.
- Once a year, we renegotiate read-only API connection fees based on the number of connections made in the previous year.

The JFTC asked EPSPs who answered “have renegotiated” in Figure 3 how the contract terms have changed after renegotiating account information reading contracts with banks. Their responses are shown in Figure 4.

Figure 4: How have the contract terms of information reading contracts with banks changed after renegotiations? (multiple responses allowed)

Answer	Number of EPSPs
Have worsened	6 (54.5%)
Have remained unchanged	4 (36.4%)
Have improved	1 (9.1%)

Source: Compiled by the JFTC from the responses to the paper-based survey (of EPSPs)

According to the paper-based survey of EPSPs, all of the EPSPs that answered “have worsened” in Figure 4 were asked by banks to accept higher read-only API connection fees when renegotiating contract terms. As a result, these fees increased.

The JFTC asked EPSPs that had been asked to accept read-only API connection fees how they felt about the bank’s explanations. Their responses are shown in Figure 5.

Figure 5: How EPSPs felt about the bank’s explanations

Answer	Number of EPSPs
All banks provided convincing explanations.	2 (33.3%)
Many banks provided sufficient explanations, but some others offered insufficient explanations.	1 (16.6%)
Some banks provided sufficient explanations, but many others offered insufficient explanations.	2 (33.3%)
All banks provided insufficient explanations.	0 (0.0%)
Others[26]	1 (16.6%)
Number of respondents	6

Source: Compiled by the JFTC from the responses to the paper-based survey (of EPSPs)

[26] Some banks explained that they wanted the respondent EPSP to bear larger share of both the costs paid to the system vendors and the system investment costs. The EPSP stated that it was not convinced, but had no choice but to accept their requests because it was difficult to accurately assess the fruits of open innovation and make a comprehensive judgment based on such assessment.

The JFTC asked both EPSPs and banks why read-only API connection fees had been raised. Excerpts from their responses are provided below:

<Why read-only API connection fees were raised>

(EPSPs)

- We understand that banks incur system development costs. However, we are not convinced that access via EPSPs should be subject to fees when general retail users can access their account information for free via an IB service.

- In explaining the rationale for charging for read-only API connection, banks told us that “read-only API connections are structurally expensive, so we want EPSPs to share some of the burden.” Because they broadly attribute the cause to “industry structure,” we do not find their explanations convincing enough.

- Banks have been under pressure from the Financial Services Agency to sign a contract with EPSPs by the end of September 2020, as required by the Amendment of the Banking Act. Some banks agreed to our request for low-cost connections and signed the contract. Some of the banks that said the contract was subject to renegotiation of the read-only API connection fees.

- Banks are strictly required to balance their accounts. Some banks that are struggling to do so because fewer EPSPs than expected have applied for connection have requested that the cost to be borne by each connecting EPSP be increased.

(Banks)

- We have increased connection fees for some EPSPs because the number of transactions with them has increased. An increase in connections means the need to review the processing capacity of the system and the storage of the database. This means higher costs for us.

It is not the case that the higher the number of transactions, the lower the cost.

The JFTC asked EPSPs whether they had renegotiated with banks for a lower read-only API connection fee. Their responses are shown in Figure 6.

Figure 6: Whether EPSPs renegotiated with banks for a lower read-only API connection fee

Answer	Number of EPSPs
Have renegotiated	3 (42.9%)
Have not renegotiated	4 (57.1%)
Number of respondents	7

Source: Compiled by the JFTC from the responses to the paper-based survey (of EPSPs)

The JFTC asked the EPSPs that answered “have renegotiated” in Figure 6 about the results of the renegotiations. Their responses are shown in Figure 7. It is worth adding that the EPSP that answered “banks agreed to reduce the fee (more than one bank)” did not achieve the desired fee reduction.

Figure 7: Results of renegotiations on read-only API connection fees

Answer	Number of EPSPs
Banks agreed to reduce the fee (more than one bank).	1 (33.3%)
No banks agreed to reduce the fee.	1 (33.3%)
Others[27]	1 (33.3%)
Number of respondents	3

Source: Compiled by the JFTC from the responses to the paper-based survey (of EPSPs)

[27] The ESPS, whose response is categorized here, consulted with banks on how to count the transactions; it did not negotiate a change in the formula for calculating the read-only API connection fee.

The JFTC asked the EPSPs that answered “have not renegotiated” in Figure 6 why they had not renegotiated with banks to reduce read-only API connection fees. Their responses are shown in Figure 8.

Figure 8: Reasons for not having renegotiated with banks to reduce read-only API connection fees(multiple responses allowed)

Answers	Number of EPSPs
Not dissatisfied with the current levels of connection fees	0 (0.0%)
Did not think banks would be willing to renegotiate for a lower connection fee	4 (57.1%)
Did not have strong bargaining chip	3 (42.9%)

Source: Compiled by the JFTC from the responses to the paper-based survey (of EPSPs)

C. Pricing of read-only API connection fees

The Report on Household Accounting Services describes in Chapter 3, Section 1, (1), B, what the EPSPs think about the levels of read-only API connection fees. It states that although “there were many opinions that ... since a bank incurs costs for the API connection infrastructure, an electronic payment service provider also must bear some costs,” ... “it is hard for the electronic service payment providers to accept a pay-for-use charge system where costs would increase without limitation.”

The JFTC asked EPSPs, industry associations, banks, and experts about the pricing of read-only API connection fees. Excerpts from their responses are provided below:

<Pricing of read-only API connection fees>

(EPSPs)

- More than half of the banks use the pay-as-you-go system for read-only API connection fees. Under such a pricing structure, we can only collect the data held by the banks a few times a month at best. This frequency

may be adequate for household accounting services, but it is inadequate for business accounting services.

- In practice, the optimal read-only API connection fee for us is one that reflects fixed ongoing costs. We are willing to pay some initial costs.

- In connection-related negotiations with banks, we always ask for fixed prices, although we are not sure this is the right pricing structure. Some argue that read-only API connections should be free. It is difficult to determine the appropriate fee level.

- Some banks use a complex formula to determine fees for read-only API connections. Since contact persons at both EPSPs and banks change constantly, the history of negotiations can be difficult to trace. It is not always a good idea to differentiate fees.

- Pay-as-you-go pricing means that the more frequency users connect, the higher the read-only API connection fees. This could eventually lead to charging users for access to their account information. This pricing structure risks not being able to continue provide such access unless banks and EPSPs agree to implement certain rules to facilitate access to read-only APIs.

- We believe that a fixed billing system would be better because the amount of money charged based on the number of accesses would be a blue ceiling. With a pay-as-you-go pricing, payments to banks with few or no users can be controlled, but it is difficult to budget for the next year and beyond.

(Industry associations)

- EPSPs serve as data hubs by coordinating with various business transactions. If an EPSP is going to discontinue its services, must give users ample notice. For operational stability, EPSPs should preferably adopt a pricing structure that makes it possible to predict how much connections will cost in a year or so.

(Banks)

- We use fixed pricing for read-only API connection fees. This is because calculating fees is easier than pay-as-you-go pricing, both for us and for EPSPs.

- We set read-only API connection fees through mutual negotiations with EPSPs in light of their business lines. However, we currently apply a tiered pay-as-you-go pricing structure.

- For corporate accounting services, we find it cumbersome to negotiate higher fees as usage (update frequency) increases. For this reason, we believe that pay-as-you-go pricing is desirable. However, some EPSPs prefer fixed pricing, claiming that they have difficulty developing business plans without fixed pricing. We also accommodate such preferences. For household accounting services for individuals, we generally use fixed pricing because few users update and check their account balances.

- For the most part, we use a fixed price structure, although we do charge pay-as-you-go fees for a few contract parties.

(Experts)

- Because System vendors charge banks on a pay-as-you-go basis, banks have no choice but to do the same with EPSPs. This practice makes it difficult for EPSPs to calculate the amount of future payments.

D. Scope of information obtained via a read-only API connection

The Report on Household Accounting Services states in Chapter 4, Section 1, (1), “[I]t is desirable that banks will expand, on an as-needed basis, the scope of information acquired with the API connection...”

The JFTC asked industry associations about the scope of information that can be acquired by connecting to banks via a read-only API connection. Excerpts from their responses are provided below:

<Scope of information that can be obtained via a read-only API connection>

(Industry associations)

- By product type, we are unable to acquire mortgage loan data or foreign currency deposit data on individual accounts from approximately 70% and about 50%, respectively, of the banks with which we do business. The inability to acquire mortgage loan data is problematic because it plays an essential role as a wealth-building tool. However, it is not the case that banks use such data as a bargaining chip. It is clear that the system is not designed for such needs.

- Banks are cooperative when asked to share data. It is therefore important for them to know whether their systems are designed for such data sharing.

(3) Terms of read-only API connections

The Report on Household Accounting Services states in Chapter 4, Section 1, (2): “[I]t would be problematic under the Antimonopoly Act if an influential bank in the market were to refuse to have transactions with an electronic payment service provider ... or otherwise achieve unjust purposes under the Antimonopoly Act (primary refusals to deal by a single enterprise, interference with a competitor’s transaction).” It adds: “It would be also problematic under the Antimonopoly Act ... if an influential bank in the market were to give, without reasonable grounds, discriminative treatment to limited electronic payment service providers regarding the price for the same service or other transaction terms, including those requiring them to connect for a higher level of connection charges compared to other electronic payment service providers ... (discriminatory pricing, discriminatory treatment).”

The Amendment of the Banking Act prohibits banks from treating EPSPs in an unreasonably discriminatory manner[28]. Since the amended Banking Act requires banks to develop and publicize their standards to be met by EPSPs in order to promote open innovation while respecting the bank's business judgment, this prohibition is based on the idea that banks must contract with EPSPs that meet such standards unless there are reasonable grounds.[29].

The JFTC asked EPSPs about the situation regarding the terms of read-only API connections. Excerpts from their responses are provided below:

[28] Article 52-61-11, paragraph (3), provides that when concluding a contract as referred to in paragraph (1) of the preceding article, a bank shall not treat an electronic payment service provider that meets the standards referred to in paragraph (1) in an unreasonably discriminatory manner.

[29] Inoue, Toshitake, gen. ed, and Yuyama, Shoichiro, Kiisuke Hatano, Daie Imachi, Yuki Nishizawa, and Hironori Takeuchi, eds. *Chikujo kaisetsu 2017-nen Ginkoho to Kaisei [Article-by-article annotations of the Act of 2017 amending the Banking Act]*. Tokyo: Shojihomu, June 2018.

<Situation regarding the terms of read-only API connections>

(EPSPs)

- Bank A approached us to raise the read-only API connection fee to a level we could not afford.
- Bank B used to charge a low fee for API connections. Then it set a high fee across the board for EPSPs, citing a change in policy. It insisted that it would cut its read-only API connections to EPSPs that refused to accept these new terms.
- Some banks charged higher fees for read-only API connections when we tried to provide other banks with the account information we received from them.
- EPSPs have no way to knowing if they are being treated unfairly. This raises the important question of how to enforce the provision of Article 52-61-11, paragraph (3) of the Banking Act.

3. Consideration in light of the Antimonopoly Act (AMA) and Competition Policies

(1) Secure EPSP access to account information

The Report on Household Accounting Services states, in Chapter 4, Section 1 (1): “[I]t is expected ... that the access to information on savings accounts in the household accounting services is secured through contracts between banks and electronic payment service providers under the Banking Act.”

In this respect, the survey has confirmed that EPSPs providing household accounting services largely have access to account information. As shown in Figure 1, nine out of ten such EPSPs responded that they “have contracted with all negotiated banks (100%)” or “have contracted with most of the banks with which we negotiated (80% or more).”

Nevertheless, one EPSP stated that less than half of the banks with which it does business have implemented an API connection infrastructure that

allows for the acquisition of mortgage loan data and foreign currency deposit data on individual accounts, as mentioned in Section 2, (2), D. This is despite the EPSPs' desire to acquire such data – in addition to balances in ordinary savings accounts, as well as deposits to and withdrawals from them – via read-only API connections in order to improve user convenience in the provision of household accounting services.

In the future, open access to various information via read-only API connections is likely to facilitate the development of new services, encourage the entry of new market participants and improve user convenience. It is therefore important to ensure that savings accounts and other types of information held by banks are widely used, while addressing security issues. Therefore, banks should preferably expand the scope of information that can be accessed via read-only API connections as needed, taking into account user needs and costs at the bank.

(2) Terms of account information reading contracts with banks

A. Renegotiating the terms of account information reading contracts

While the survey confirmed that EPSPs largely have access to account information, the terms of many account information reading contracts between EPSPs and banks have been renegotiated, as such contracts are often only for one year, as discussed in Section 2, (2), A.

Some banks do not charge read-only API connection fees to encourage open innovation and improve user convenience. Others offer discounts in consideration of ongoing or possible collaboration with EPSPs. Meanwhile, some EPSPs have been asked by banks to renegotiate read-only API connection fees after the conclusion of account information reading contracts. As the main reason for this request, the banks point out that these contracts are only provisional, and they say that they had to sign such provisional contracts because the deadline for signing such contracts set by the Amendment of the Banking Act was approaching, as discussed in Section 2, (2), B. As a result, read-only API connection fees have been increased in many cases. Some

EPSPs believe that some banks have failed to provide specific explanations for such fee increases.

In principle, a bank's management has the freedom to charge the terms of the transaction to adapt to changing circumstances, such as an increase in the number of accesses via API connection infrastructure.[30] A bank with a superior bargaining position over an EPSP may violate the Antimonopoly Act (AMA) if it renegotiates the terms of contract in such a way to unfairly disadvantage the transacting party, taking into account normal business practices (abuse of a superior bargaining position).[31]

To avoid violating the AMA with respect to EPSPs, banks that intend to change transaction terms that may be contrary to the interests of EPSPs, such as increasing read-only API connection fees, should preferably provide adequate explanations.

For read-only API connection fees, different banks use different pricing structures, including pay-as-you-go pricing, tiered pay-as-you-go pricing, and fixed pricing. Since banks need to ensure sufficient system capacity and flows for their transaction volumes, the pay-as-you-go pricing structure has a certain rationality. Meanwhile, as mentioned in Setion 2, (2), C, one EPSP stated that the pay-as-you-go pricing structure makes it difficult to calculate the amount of future payments as the number of accesses increases. This EPSP explained that it has no

[30] What is meant by a company having a superior bargaining position over a transacting party is that if the company makes a request, etc., that is substantially disadvantageous to the transacting party, the transacting party would not be able to avoid accepting such a request, etc., in view of the fact that if it becomes difficult for the transacting party to continue transactions with the company, the transacting party's business management would be substantially impeded (the Guidelines Concerning Abuse of Superior Bargaining Position under the Antimonopoly Act, Section II, 1).

[31] The Report on Household Accounting Services states, in Chapter 4, Section 1, (2), "[O]nce an electronic payment service provider has concluded a contract with a bank, if it is no longer able to access the bank, and thus many of the users discontinue using its household accounting service, the more the household accounting service has been used by holders of savings accounts of the bank, the more its business management would face a serious difficulty, so that it is very likely that the provider would be forced to accept any terms presented by the bank even if they are disadvantageous for the provider."

choice but to limit the monthly acquisition of account information by users, in order to limit the amount of connection fees it pays to banks.

Therefore, in order to facilitate innovation, improve user convenience and encourage new entrants to the household accounting services, banks should preferably develop a standard pricing structure for their read-only API connection fees to the extent that it ensures the stability and sustainability of their business. The idea is to make it easier for EPSPs to estimate the amount of read-only API connection fees they will pay to banks. Upon request by EPSPs, banks should preferably explain the rationale behind the applicable read-only API connection fees.

B. Terms of read-only API connections

As noted in Chapter 3, Section 1, (2), the survey found some cases where banks themselves stated to offer household accounting services after the previous surveys. Such banks are in competition with EPSPs in the field of household accounting services; therefore, they may have incentives to exclude competing EPSPs or interfere with their transactions. In such a case, an influential bank in the market[32] may violate the AMA if it refuses to deal with EPSPs, raises connection fees to a level that can be construed as an effective refusal of to deal with them, restricts the handling of information it receive from them, or takes any other similar action as a means of achieving a goal prohibited by the AMA, such as foreclosing competitors from the market (refusal to trade, interference with a competitor's transactions).

Even a bank that does not provide household accounting services, but is influential in the market, could also violate the AMA if it unfairly discriminates against certain EPSPs with respect to the price of the same service or other transaction terms, such as requiring them to connect via read-only APIs at a higher cost than other EPSPs or

[32] As a rule of thumb, a company with a market share of more than 20% is considered influential in the market (Guidelines Concerning Distribution Systems and Business Practices under the Antimonopoly Act, Part I, 3, (4)).

restricting the use of information obtained from them, without reasonable justification (discriminatory consideration, discriminatory treatment on trade terms). [33]

In this context, read-only API connection fees are determined by separate negotiations between a bank and an EPSP. This means that an EPSP has little opportunity to know how much other EPSPs pay to the same bank. It is therefore difficult for an EPSP to assess whether the read-only API connection fees it pays to the bank are unfairly higher than those paid its competitors.

The survey did not identify any clear cases of discrimination. Going forward, it is appropriate for the relevant ministries and agencies to monitor the situation on an ongoing basis to ensure that there is no unfair discriminatory treatment.

[33] As mentioned in 2, (3), the Amendment of the Banking Act prohibits banks from discriminating unfairly against EPSPs.

Chapter 4: Status of the Code Payment Market

The Code Payments Report made four major recommendations: (i) set appropriate CAFIS[34] fees and using read-write APIs, (ii) review transaction practices in relation to interbank fees[35], (iii) strengthen the governance structure of Zengin-Net[36] and ensure transparency of transactions, and (iv) explore ways to open up access to the fund payment system[37] to fund transfer service providers (FTSPs). These four recommendations are detailed below:

<Set appropriate CAFIS fees and use read-write APIs (Recommendation 2, mentioned earlier in Chapter 2, Section 1)>

○ [I]n light of considerations of the fact that CAFIS effectively is essential infrastructure to account charging and other transactions and the volume of such transactions is increasing, it would be desirable, from a competition-policy perspective, for these to be set appropriately through negotiation with user businesses.

○ [I]t would be desirable, in order to increase competitive pressure on retail payment infrastructure connected to bank systems, to promote efforts to develop an environment in which it would be easy for non-bank code payment providers to use Read/Write APIs…

<Review transaction practices in relation to interbank fees (Recommendation 3, mentioned earlier in Chapter 2, Section 1)>

○ [E]fforts should be made to rectify the current situation under which interbank fees have been maintained for many years at levels greatly exceeding the actual administrative costs incurred by individual banks…

[34] See Section 2, (1), C, (a) later in the report.

[35] See Section 3, (2) later in the report.

[36] See Section 2, (1), C, (a) later in the report.

[37] See Section 3, (1) later in the report.

<Strengthen the governance structure of Zengin-Net and ensure transparency (Recommendation 4, mentioned earlier in Chapter 2, Section 1)>

○ [I]t would be desirable for Zengin-Net to develop and enhance a governance structure capable of fully reflecting the needs of end users of the [the Domestic Funds Transfer S]ystem…and to secure transparency in transactions conducted using it.

<Explore ways to open up access to the fund payment system to fund transfer service providers (FTSPs) (Recommendation 5, mentioned earlier in Chapter 2, Section 1)>

○ [I]t would be desirable for Zengin-Net to consider developing business requirements (legal qualifications), security standards, and conditions on the financial standing for businesses to join the Domestic Funds Transfer System and opening up access to fund transfer service providers that satisfy these standards.

In order to assess progress in implementing these recommendations, Chapter 4 describes the status of transactions between non-bank code payment providers (see Chapter 4, Section 1, (1)) and banks, as well as initiatives taken by Zengin-Net, in light of the changes in the transactional environment since the previous surveys were conducted. In view of these situations, it also explains the JFTC's consideration in light of competition policies.

This chapter also reviews the progress of the government's efforts to introduce paycheck deposits into FTSP accounts. Such efforts have been made to address the institutional problems described in Chapter 4, Section 3 of the Code Payments Report, which states that "wages may not be deposit transferred, even in part, to non-bank accounts, such as accounts with fund transfer service providers."

1. Overview of Code Payment Services

(1) Code payment services

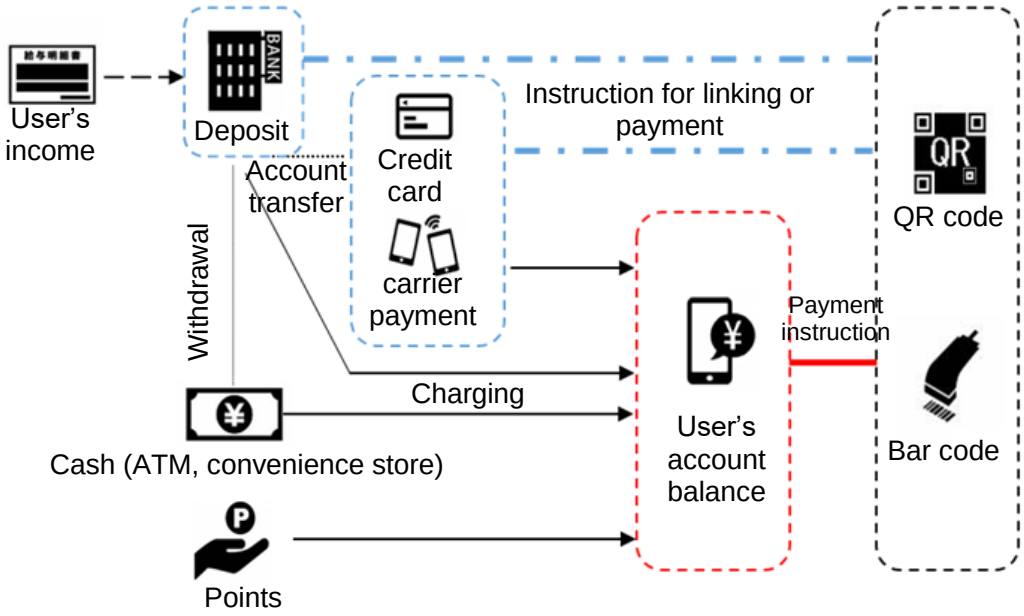
A code payment service is a service where the user makes a payment by reading a QR code or a bar code using a payment app on his or her smartphone. Providers of code payment services (hereinafter referred to as "code payment providers") include not only banks offering code payment services (hereinafter referred to as "banks offering code payment services" [38]) but also non-bank providers (hereinafter referred to as "non-bank code payment providers").

The monetary value exchanged in a code payment is primarily the balance of the account managed by the code payment provider in a payment app (hereinafter referred to as "account balance"). When the user purchases a product, the payment process is typically as follows: the code payment provider deducts the amount corresponding to the price of the product from the user's account balance, and the code payment provider makes a payment of the sales proceeds to the member merchant on behalf of the user. Therefore, the user's account balance must be increased ("charged") before the code payment service can be used by the user.

In addition, there are payment methods that do not use a balance. One such method is for the user to use a code to direct a payment so that the invoice amount is debited directly from the user's bank account at the time of purchase or later if multiple invoices for purchases made by the user over a period of time are to be debited all at once. Another method is to process the payment using a credit card. (Hereinafter, these two methods are referred to as "linking" to a bank account or credit card. Similarly, account balances, bank account deposit, and credit card limits that are used as monetary value at the time of code payment are collectively referred to as "payment means.")

[38] Credit associations, credit unions, the Agricultural and Forestry Central Bank, the Central Cooperative Bank for Commerce and Industry, agricultural cooperatives, fishery cooperatives, and other entities that banking activities under laws and regulations other than the Banking Act are not banks, strictly speaking. However, they are collectively referred to here as "banks offering code payment services."

Figure 9: Means of payment and account charging used for a code payment



Source: Code Payments Report

A. Banks offering code payment services

Accordingly, there are two means of code payment provided by banks offering code payment services. One is for the user to link with his or her savings account with a bank that providing code payment services. The other is for the user to use the balance in a code payment account that he or she charges from his or her savings account via a payment app. The number of banks providing code payment services is increasing.. In the bank survey, 71 banks reported that they provide payment services, up from 63 banks in the previous surveys.

These code payment services provided by banks offering code payment services are divided into three types:

(i) Those provided by banks that provide code payment services to users who have an account with them,

(ii) Those provided by banks offering code payment services to users who have an account with them, which can be used at affiliated

member merchants by linking with code payment services provided by other banks offering code payment services; and

(iii) Those provided by certain banks that allow for account charging from accounts at banks other than banks that provide code payment services

B. Non-bank code payment providers

Many non-bank code payment providers provide services to refund a balance to a deposit account or in cash. As these services fall under the category of funds transfer, non-bank code payment providers or their subsidiaries are[39] often registered as FTSPs.[40] In the survey of FTSPs, eight FTSPs[41] responded that they were registered as FTSPs and provided code payment services accordingly (the number was unchanged from the previous surveys). (Hereinafter, non-bank code payment providers registered as FTSPs are referred to as “registered non-bank code payment providers”).

Unless otherwise noted, the paper-based survey of FTSPs focused on registered non-bank code payment providers.

[39] Article 37 of the Payment Services Act. Under the amended Payment Services Act, which took effect in May 2021, funds transfer services are divided into three types: "Type I funds transfer services," "Type II funds transfer services," and ""Type III funds transfer services." Non-bank code payment providers are registered for type II funds transfer services, which will be subject to the same regulations as “funds transfer services” as defined above. Therefore, this report refers specifically to FTSPs registered for type II funds transfer services as “FTSPs.” See Figure 24 for details of the types of FTSPs.

[40] In addition to FTSPs, there are companies that offer code payment services. They are legally qualified either as a third-party prepaid payment issuer (Article 7 of the Payment Services Act) or as a company that has concluded an agreement on the handling of credit card numbers and other credentials (Article 35-17-2 of the Installment Sales Act). (For details, see Chapter 2, Section 1, (3), B of the Code Payments Report.)

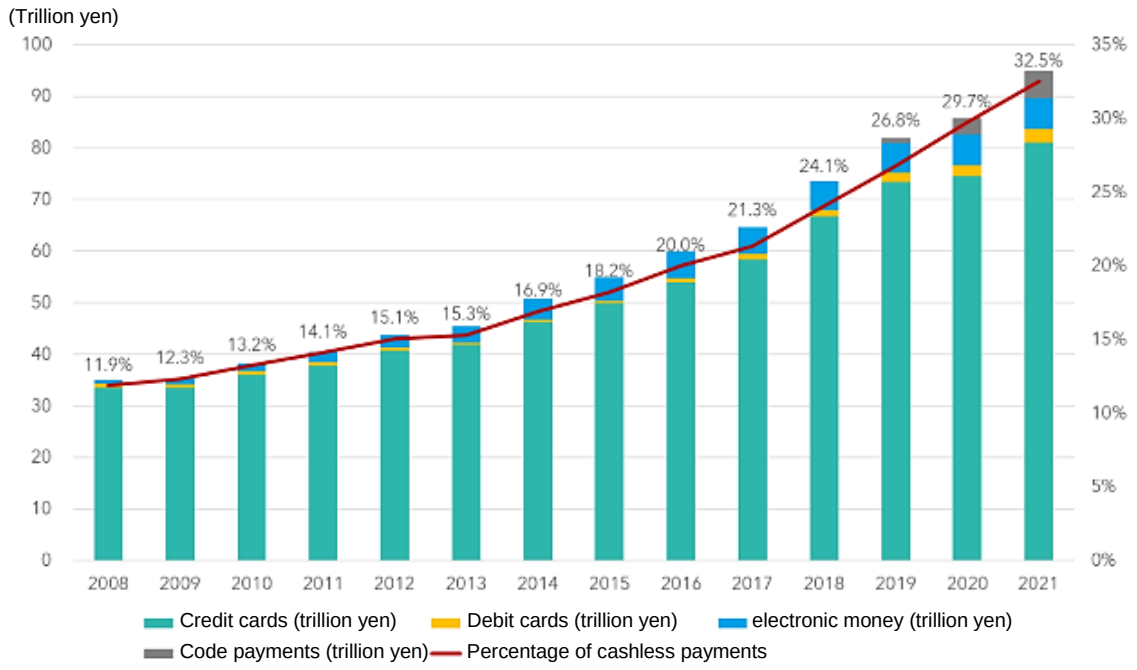
[41] These are not necessarily the same eight companies that reported offering code payment services in previous surveys.

(2) Scale of transactions and usage

A. Scale of transactions

According to “Cashless Roadmap 2022” published by the Payments Japan Association in August 2022 (hereinafter referred to as “Roadmap 2022,”), cashless payments accounted for 32.5% of private final consumption expenditure in 2021. Of this, code payments accounted for 5.6%, a sharp increase of 66.3% year on year.

Figure 10: The total amount of cashless payments and its percentage in private final consumption expenditure



Source: Translated by the JFTC from the Payments Japan Association, “Cashless Roadmap 2022 [in Japanese]”

Figure 11: Percentage of each type of cashless payments in the total amount of cashless payments

Means of payment	Percentage in the total amount of cashless payments			Rate of change[42]	
	2019	2020	2021	2020	2021
Credit card	89.7%	86.8%	85.3%	1.4%	8.8%
Debit card	2.1%	2.5%	2.8%	25.8%	25.1%
Electronic money	7.0%	7.0%	6.3%	4.9%	-1.1%
Code payment	1.2%	3.7%	5.6%	230.0%	66.3%
		Total amount of cashless payments		4.8%	10.6%

Source: Translated by the JFTC from the Payments Japan Association, “Cashless Roadmap 2022 [in Japanese]”

B. Code payment usage

The number of code payment transactions seems to be growing rapidly. According to Roadmap 2022, the number of code payment transactions accounted for19.4% of the total number of cashless transactions in 2021, an increase of 80.1% from the previous year.

[42] Amount for the year / Amount for the previous year -1

Figure 12: Percentage of each type of cashless payment transactions (in number) in total cashless payment transactions

Means of payment	Percentage in total cashless payment transactions in number			Rate of change[43]	
	2019	2020	2021	2020	2021
Credit card	60.7%	58.2%	55.3%	11.2%	9.7%
Debit card	1.8%	2.3%	2.5%	45.2%	25.9%
Electronic money	33.1%	27.1%	22.8%	-5.0%	-3.1%
Code payment	4.3%	12.4%	19.4%	233.1%	80.1%
		Total number of cashless payment transactions		16.1%	15.4%

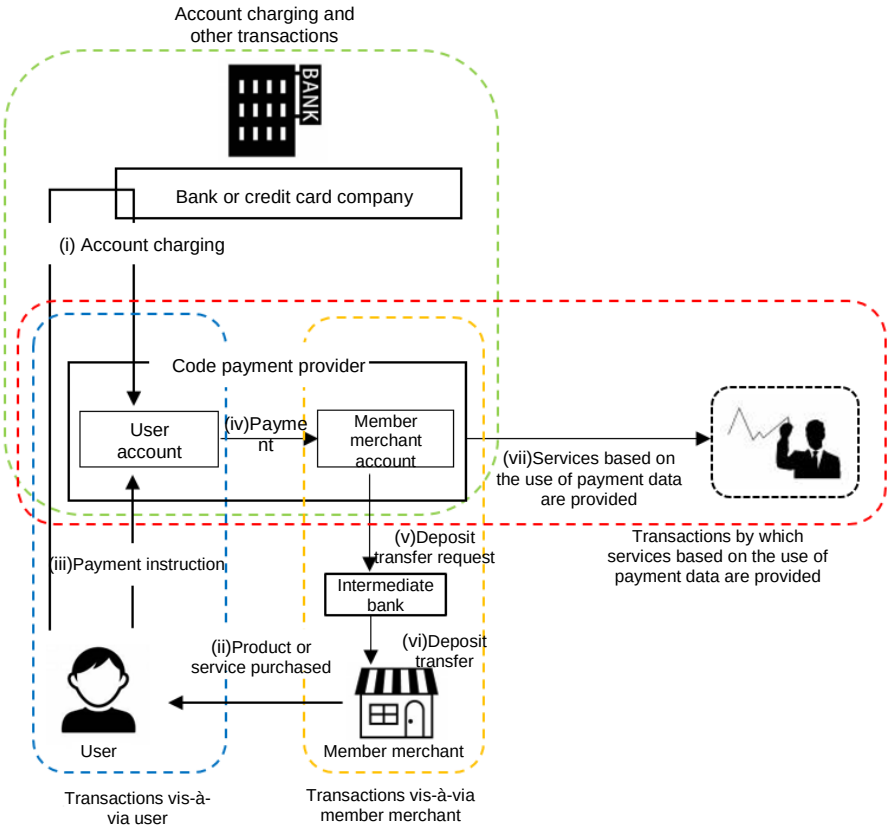
Source: Translated by the JFTC from the Payments Japan Association, “Cashless Roadmap 2022 [in Japanese]”

(3) Flow of code payment transactions and four business relationships involving code payment providers

The Code Payments Report states in Chapter 2, Section 1, (4) that many code payment services currently provided involve payments made using account balances. The flow of code payment transactions based on the use of account balances is shown in Figure 13.

[43] Number of transactions for the year / Number of transactions for the previous year -1

Figure 13: Flow of code payment transactions



(i)	The user increases his or her own account balance on the code payment provider's payment app from his or her own bank or credit card company through this app.
(ii)	The user purchases a product or service from a member merchant.
(iii)	The user uses a code to issue a payment instruction to the member merchant.
(iv)	The code payment provider, in accordance with the user's payment instruction, deducts from the user's account balance and disburses payment of the cost of the product (sales proceeds) to be paid by the user to the member merchant to settle the account between the user and the member merchant. (Sales proceeds are managed with the code payment provider account opened by the member merchant.)
(v)	The code payment provider, in accordance with the frequency of disbursements agreed to by and between the provider and the member merchant, submits a request to have a deposit transfer made to the member merchant's bank account to the bank in order to pay sales proceeds amassed by the member merchant through payments as described in (iv).
(vi)	The bank receiving the deposit transfer request (hereinafter referred to as "intermediate bank") disburses funds to the member merchant's bank account through a deposit transfer.
(vii)	In some cases, the code payment provider may utilize payment data amassed through transactions vis-à-vis users and transactions vis-à-vis member merchants to provide marketing services and engage in other functions.

Source: Code Payments Report

In light of the flow of transactions described above, the Code Payments Report assessed how such transactions are actually conducted, focusing on four types of transactions: (i) account charging or linking,[44] (ii) transactions to users,[45] (iii) transactions to member merchants,[46] and (iv) transactions providing services based on the use of payment data.[47] As a result, the report identified some problems with transactions involving the receipts and disbursements of funds in code payments with respect to (i) and (iii) above. These problems are related to individual transactions, financial infrastructure, and institutional arrangements. In light of these findings, the report made Recommendations 2–5 as noted above.

More recently, CAFIS fees have been reduced and interbank fees have been replaced by “Domestic Funds Transfer System Operational Costs” as noted in Section 2, (2), A, (a). Thus, this survey assessed the current state of funds transfer fees for two of the four types of transactions mentioned above: (i) account charging or linking, and (iii) transactions to member merchants.

[44] A business relationship between a bank or credit card company and a non-bank code payment provider that is necessary to enable the non-bank code payment provider to perform a balance recharge or establish a link with the bank. (These actions are hereinafter collectively referred to as ”account charging or linking”)

[45] A business relationship in which a code payment provider provides code payment services to users.

[46] A business relationship in which a code payment provider provides code payment services to member merchants.

[47] A business relationship in which data collected by a code payment provider through its transactions with users and member merchants is used to provide users, member merchants, and third parties with marketing and other services based on such payment data.

2. Receipts Flow from Users (Account Charging or Linking Transactions)

(1) Overview, etc. of receipts flow from users (account charging or linking transactions)

A. Overview of the receipts flow from users (account charging or linking transactions)

Non-bank code payment providers need to transact with banks to undertake account charging or establish a link with them.

As banks offer deposit services to users, they enable users to make a code payment by performing account charging or linking in relation to users' accounts with them when providing code payment services.

Non-bank code payment providers, on the other hand, allow users to make a code payment by providing them with the means to perform account charging or linking using a bank account, credit card, carrier payment[48], cash, or points.

Since the users' salary or other source of income is generally transferred to his or her bank account,[49] the use of a code payment service involves a withdrawal of the amount billed from his or her bank account or the withdrawal of a deposited amount, even if the account charging or linking is performed from a credit card, a carrier payment service or in cash. For this reason, non-bank code payment providers must have funds transferred from users' bank accounts in order to secure a payment funds for code payment services. (See Chapter 2, Section 2, (1), A of the Code Payments Report for details on account charging or linking transactions).

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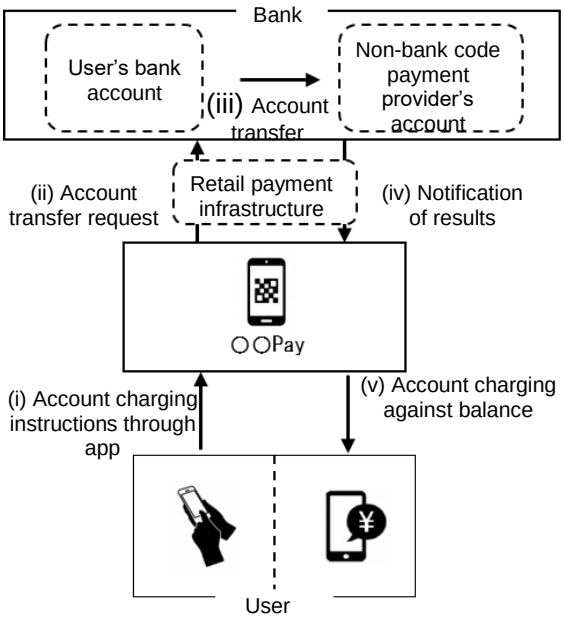
[48] Refers to a payment service that allows a user to pay for of a product or service by charging it to their mobile phone bill.

[49] Under the Labor Laws, the transferring of wages paid by an employer to a worker's bank account is recognized as an exception to the rule of paying wages in cash (Article 24 of the Labor Standards Act and Article 7-2 of the Ordinance for the Enforcement of the Labor Standards Act). See Section 2, (3) later in this chapter for information on paycheck deposits into FTSP accounts.

B. Flow of account charging or linking

Non-bank code payment providers that provide users with a means to initiate account charging or linking using a credit card, a carrier payment service, cash, a convenience store, or an ATM enter into an agreement that allows users to initiate account charging or linking with relevant service providers, including credit card companies, mobile phone carriers, convenience stores, and ATM operators. (See Chapter 2, Section 2, (1), B of the Code Payments Report for details of the account charging or linking).

Figure 14: Flow of steps for account charging from a bank account



(i)	The user issues account charging instructions through a payment app.
(ii)	The nonbank code payment provider makes a request, in accordance with the user's instructions, for an account transfer from the bank account for which the user concluded an account transfer agreement, to the provider's own account, via a network for connecting to the bank's core system, which is referred to as a retail payment infrastructure, or a Read/Write API connection infrastructure.
(iii)	The bank undertakes an account transfer as requested by the nonbank code payment provider.
(iv)	The bank, after undertaking the account transfer, issues a notification of the results thereof to the nonbank code payment provider via the retail payment infrastructure or Read/Write API connection infrastructure.
(v)	Upon being notified of the results by the bank, the nonbank code payment provider increases the balance of the user's account.

Source: Code Payments Report

The JFTC asked FTSPs to list the means of account charging in the order of their percentages of the total. Their responses are summarized in Figure 15.

Figure 15: Means of account charging in the order of their percentages of the total in fiscal 2021[50]

	1st	2nd	3rd	4th
Provider A	Cash[51]	Bank account	Others[52]	-
Provider B	Bank account	Cash	Others	-
Provider C	Others	Cash	Credit card	Bank account
Provider D	Others	Bank account	-	-
Provider E	Bank account	Cash	Others	Credit card
Provider F	Bank account	-	-	-
Provider G	Others	Cash	-	-

Source: Compiled by the JFTC from the responses to the paper-based survey of FTSPs

C. Retail payment infrastructure and read-write APIs

In order for the user to initiate account charging from his or her bank account, the non-bank code payment provider must transmit account charging instructions from the user to the bank's core system via its own payment app. For security reasons, the bank's core system can only be accessed through limited means. These means available to the non-bank code payment provider are limited to a service provided by a retail payment infrastructure provider,[53] a read-write API implemented by the bank, or a proprietary system.

[50] The funds with the largest percentage of total amount of funds charged is referred to as "1st." The means with the second largest percentage is referred to as "2nd," and so on. Seven of the eight registered non-bank code payment providers responded.

[51] Refers to the means by which users charge their account balance with cash from an ATM or at a bank counter.

[52] Refers to means of account charging or linking other than "bank account," "credit card," and "cash," such as charging from users' income through other services provided by these FTSPs (such as an auction), credit card charge accounts, and carrier payments.

[53] Refers to a company that provides a service that establishes a connection between the code payment app and the user's bank account when the user initiates account charging or linking for the code payment account balance from his or her bank account.

(a) Retail payment infrastructure

Services for connection to the bank's core system have traditionally been provided by two retail payment infrastructure providers:

(i) NTT Data Corporation (hereinafter referred to as "NTT Data"), which provides the Instant Payment Gateway Service for transmission of account transfer information as a service using a system known as CAFIS[54]; and

(ii) Japan Card Network Co., Ltd. (hereinafter referred to as "Japan Card Network"), which provides the Real-Time Account Transfer Service for transmission of account transfer information as a service using a system known as CARDNET[55].

After the previous surveys were completed, two other companies began to provide services similar to retail payment infrastructure. These two companies are:

(iii) Lawson Bank, Inc. (hereinafter referred to as "Lawson Bank"), which provides an Instant Account Payment Service for transmitting account transfer information as a service that uses existing ATM networks.

(iv) The Japan Electronic Payment Promotion Organization (JEPPO), which provides a service for transmitting account transfer information using the mechanism of Bank Pay,[56] a code payment service provided by banks

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[54] Credit And Finance Information Switching System. Originally developed by the former Nippon Telegraph and Telephone Public Corporation, CAFIS is now a credit card authorization service offered by NTT Data. It is also used for acount charging or linking in code payments as a means of connecting to a bank's core system.

[55] CARDNET, operated by Japan Card Network, is a credit payment network that connects credit card companies with member merchants. It is also used for account charging or linking in code payments as a means of transmitting account transfer information to banks.

[56] Under this scheme, non-bank code payment providers become member merchants of Bank Pay in order to account charging or linking from accounts at financial institutions participating in Bank Pay.

Recently, the Japanese Banks' Payment Clearing Network (hereinafter referred to as "Zengin-Net") announced that it will relax the qualifications for participation in the Zengin Data Telecommunication System (hereinafter referred to as "the Zengin System") on October 7, 2022.[57] FTSPs[58] that join in the Zengin System will be able to transmit account transfer information through the Zengin System.

On October 11, 2022, Cotra Ltd. launched COTRA, a service for small-value transfers between individuals.[59] The participation of FTSPs in COTRA will enable their users to receive remittances via COTRA, thus allowing them to increase their account balances just like account charging via account transfers.

The above four services and others used different means of connecting to banks:

- Services (i), (ii), and (iv) use NTT Data's CAFIS. For details on Services (i) and (ii), see Chapter 2, Section 2, (1), B of the Code Payments Report.

- Service (iii) may opt for CAFIS or direct connection depending on the bank that uses this service.

- COTRA needs to use a read-write API, but may opt for CAFIS for some connections.[60]

The availability of the Zengin System is expected to allow FTSPs to make direct connections without using CAFIS, depending on how the

[57] See Chapter 4, Section 4, (2) later in this report.

[58] "Expansion of Qualification for Participation in the Zengin System," a press release issued by Zengin-Net on September 15, 2022). According to this press release, participants in the Zengin System should be deposit-taking financial institutions or FTSPs.

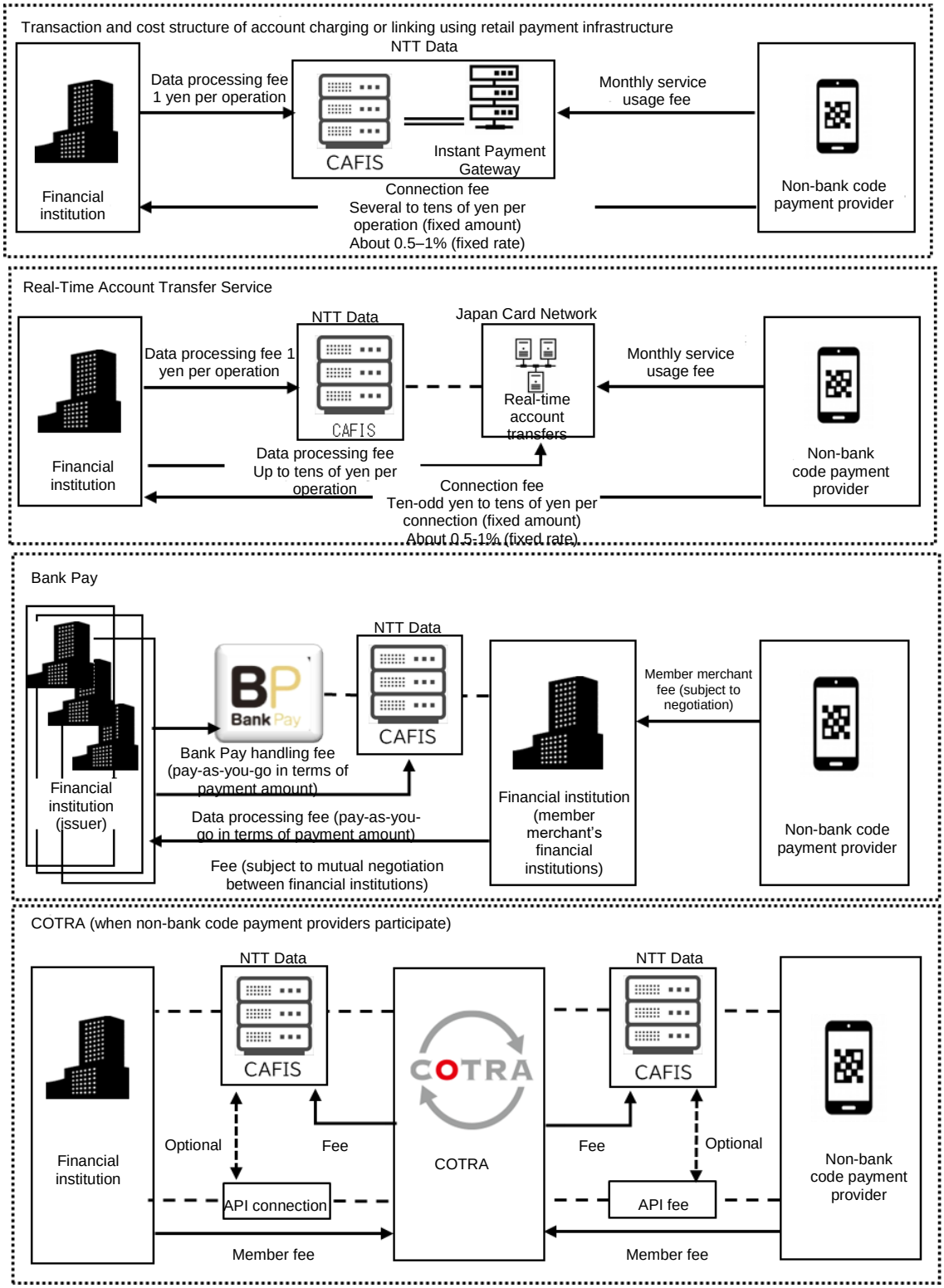
[59] A system of remittances between individuals using a smartphone. Under the system, the user can send up to 100,000 yen at a time, with the only credential being the mobile phone numbers; account numbers are not required. The transfer fee is set by the companies participating COTRA. As of January 2023, the service is free of charge across the board.

[60] According to Cotra Ltd., CAFIS is one of the connectivity options it offers to reduce the burden on participating banks.

system is operated, although such operational procedures have yet to be defined.

Figure 16 illustrates the transaction and cost structure of account charging or linking provided by non-bank code payment providers on the retail payment infrastructure.

Figure 16: Transaction and cost structure of account charging or linking using retail payment infrastructure



Note: The JFTC is not allowed to describe the transaction and cost structure of the Instant Account Payment Service here

Source: Compiled by the JFTC from the Code Payments Report and the results of the interviews conducted under this survey

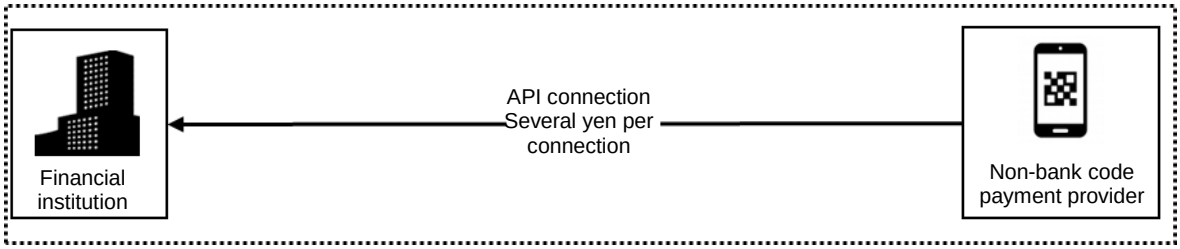
(b) Read-write APIs

Read-write APIs are designed to update account information, including funds transfer data such as funds and account transfers. As with read-only APIs, banks must implement what is known as an API connection infrastructure to allow non-bank code payment providers to access their core banking systems over an internet network.

The Code Payments Report states in Chapter 4, Section 2, (1), that "[I]t would be desirable, in order to increase competitive pressure on retail payment infrastructure connected to bank systems, to promote efforts to develop an environment in which it would be easy for nonbank code payment providers to use Read/Write APIs..."

Figure 17 illustrates the transaction and cost structure of account charging or linking provided by non-bank code payment providers based on read-write APIs.

Figure 17: Transaction and cost structure of account charging or linking using read-write APIs



Source: Code Payments Report

The JFTC asked banks and FTSPs about the need for read-write APIs. Excerpts from their responses are provided below:

<Needs for read-write APIs>

(Banks)

- We want FTSPs to use read-write APIs. We are thinking about offering free connections if they make connections through such APIs.
- We use read-write APIs to deposit paychecks and make advance payments.
- We intend to limit fees by using read-write APIs to bypass intermediaries, thus reduce the costs to both banks and FTSPs for wider adoption.

(FTSPs)

- The advantages of using read-write APIs include lower costs, no account registration fees to pay to intermediaries, high robustness as banks can implement the authentication infrastructure themselves, and greater freedom in terms of UI and UX.
- We believe that system development costs are lower compared to CAFIS connections. We have never heard that developing an environment to use read-write APIs costs tens of millions of yen. We hope that banks will converge standards for read-write APIs to some extent. This would allow us to connect to two or more banks with one-time system development, thereby reducing the cost and time of system development.

The JFTC asked banks about their implementation status of read-write APIs. Their responses are summarized in Figure 18.

Figure 18: Implementation status of read-write APIs

Answer	Number of banks
Already implemented	62 (51.7%)
Not yet implemented but intend to	15 (12.5%)
Not yet implemented and do not intend to	9 (7.5%)
Undecided or considering	21 (17.5%)
Others	13 (10.8%)
Number of respondents	120

Source: Compiled by the JFTC from the responses to the paper-based survey (of banks)

The JFTC asked banks which account transfer services they used. Their responses are summarized in Figure 19.

Figure 19: Account transfer services used by banks (multiple responses allowed)

Answer	Number of banks
Real-Time Account Transfer Service	71 (47.6%)
Instant Payment Gateway Service	43 (28.9%)
Read-write APIs	16[61] (10.7%)
Others[62]	19 (12.6%)
Number of respondents	149

Source: Compiled by the JFTC from the responses to the paper-based survey (of banks)

The JFTC asked the banks that answered “already implemented” in Figure 18, registered non-bank code payment providers, and industry associations about their progress in read-write API connections. Their responses indicate that little progress has been made. Excerpts from their responses are provided below:

[61] Twelve out of the 16 banks also use other account transfer services than read-write APIs. Only four of the 120 banks that responded (3.3%) offer account transfer services using only read-write APIs.

[62] The Instant Account Payment Service and Bank Pay

<Reasons why there has been little progress in read-write API connections>

(Banks)

- Read-write API specifications are not well standardized. Until they are sufficiently standardized, read-write API connections impose a heavy burden on non-bank code payment providers.
- We believe that read-write API connections are less costly. However, we have not been asked by non-bank code payment providers to switch to read-write API connections.
- We have not heard from any non-bank code payment providers that they want to use a read-write API. We suspect that using a read-write API will put a strain on the systems of non-bank code payment providers. They do not seem to see any benefit that outweighs such a burden.
- The read-write APIs we have support batch transfers and payroll transfers. We can provide transfer instructions with an API. However, due to security concerns, we need to switch to IB to authorize transfers. Accordingly, connecting to a read-write API does not allow us to perform seamless operations such as those currently offered by non-bank code payment providers.

(Registered non-bank code payment providers)

- Most online banks have read-write APIs. But these APIs differ in specifications, which means that system development is a heavy burden for non-bank code payment providers. Therefore, there should be general standard specifications.
- We believe that read-write APIs are not widely used because their is no benefit to banks from their wider use. The implementation of read-write APIs will not lead to an increase in fees from non-bank code payment providers; rather, it will lead to higher security risks and the need to pay higher fees to system vendors.

- Wider use of read-write APIs is desirable as an option to reduce the cost burden on FTSPs. However, uncertainty about the cost of implementing read-write APIs makes it difficult to make an early decision in favor of read-write APIs.

- In order to ask banks to let us connect to them via read-write APIs, we need to find out who the contacts are and whether they even have read-write APIs – and if so, what kind of APIs they have. We also need to negotiate the fee with each bank. So we hope that each bank will publish the contact person, the list of their read-write APIs, and the standard pricing structure.

(Industry associations)

- Because read-write APIs involve fund transfers, two-factor authentication is required. Since the means of such authentication varies from bank to bank, we have to develop systems that accommodate these different means. This is a problem.

The further implementation of read-write APIs by banks also has some advantages for EPSPs. For example, consider EPSPs that are connected to banks via read-write APIs and provide accounting services. The user of such an accounting service may be able to perform a funds transfer by giving an instruction on a screen in the accounting service without moving the service to IB at the receiving bank. The JFTC asked an industry association of which EPSPs are members about the implementation status of read-write APIs at banks. Excerpts from their responses are provided below:

<Implementation status of read-write APIs at banks>

(Industry association of which EPSPs are members)

- Our impression is that about 5% of the banks offer read-write APIs that are needed for different EPSPs. Currently, banks do not disclose the features of the read-write APIs they have implemented. We hope that they will publish them in the form of a product list. Some banks claim that they have implemented read-write APIs because they have read-write APIs that have the function of prearranging transfers. But such APIs are useless; they do not meet the requirements of EPSPs. Funds transfers cannot be completed within the services provided by EPSPs because they need to be approved by IB. In addition, some APIs are only available on condition that users sign a service agreement. This practice is contrary to the spirit of open banking.

- We believe it is important to standardize specifications. Standardizing the specifications of read-write APIs is also expected to close the gap in security levels between banks. We also believe that the cost of maintaining read-write APIs will be reduced if system vendors standardize their specifications instead of sticking to their own.

(2) Costs incurred when account charging or linking is executed from bank accounts

A. Where retail payment infrastructure are used

(a) Costs paid by banks to retail payment infrastructure providers

According to the Code Payments Report and the interview survey of banks, banks pay retail payment infrastructure providers an installation fee when a new connection to a bank is established and a data processing fee incurred each time a user undertakes account charging or linking.

The JFTC asked banks whether they pass on all or part of the cost paid to retail payment infrastructure providers to non-bank code

payment providers. Excerpts from their responses are provided below:

<Status of the pass-through of costs to retail payment infrastructure providers to non-bank code payment providers>

(Banks)

- Non-bank code payment providers pay us enough to cover our normal expenses, including the cost we pay to retail payment infrastructure providers.
- We incurred high initial costs in connecting with non-bank code payment providers as we made extensive system arrangements. Recently, however, the associated revenues have increased as access has grown. Simply put, this business is now in the black.
- We are able to pass on to non-bank code payment providers the costs we incur, such as the costs we pay to retail payment infrastructure providers.

Regarding the CAFIS fees paid by banks to NTT Data, which are part of data processing fees, the Code Payments Report states, “[I]t has been more than a decade since CAFIS’ metered fees per data processing were revised last... in consideration that CAFIS effectively is essential infrastructure to account charging or linking and the volume of such transactions is increasing, it would be desirable, from a competition-policy perspective, for these to be set appropriately through negotiation with user businesses.”

More recently, on October 1, 2020, CAFIS fees were reduced from a maximum of 3.15 yen to one yen per transaction.

The JFTC asked NTT Data about the reasons for the CAFIS fee reduction and its effects. Excerpts from its responses are provided below:

<Reasons for and effect of the CAFIS fee reduction>

(NTT Data)

- We reduced CAFIS fees as the volume of account charging transactions through CAFIS, including those using our competitors' retail payment infrastructure, increased.
- Although the reduction in CAFIS feeshas had an impact on CAFIS sales or revenue, we expect that it will have a positive in the future as it will lead to cashless payments.

(b) Costs paid by non-bank code payment providers to banks

The Paper-based survey of FTSPs shows that registered non-bank code payment providers pay the initial connection cost[63] to banks to allow users to perform account charging or linking from their bank accounts. The cost is (i) several million or tens of million yen for a large bank, (ii) 0 to several million yen for a regional bank, and (iii) 0 to several million yen for an online bank. They also pay connection fees[64] for every account charging or similar transaction.

As noted in (a) above, the CAFIS fees that banks pay to NTT Data have been reduced. The JFTC asked FTSPs whether this reduction was accompanied by a reduction in connection fees that banks charge to them. Their responses are summarized in Figure 20. The JFTC also asked FTSPs that answered "one or more banks reduced the fees" how much connection fees were reduced. All the FTSPs answered "2 yen or more but less than 2.5 yen."

[63] The initial connection cost, which often includes the cost of connection testing and fixed costs, varies from provider to provider based on factors such as transaction volume and benefits to banks.

[64] In addition, registered non-bank code payment providers pay banks tens or hundreds of yen for each instance of linking to a user's bank account.

Figure 20: A reduction, if any, in CAFIS fees paid to banks

Answer	FTSPs
One or more banks reduced the fees	4 (66.7%)
No banks reduced the fees	2 (33.3%)
Number of respondents	6

Source: Compiled by the JFTC from the responses to the paper-based survey of FTSPs

The JFTC asked FTSPs whether they had requested a reduction in connection fees, citing the reduction in CAFIS fees paid by banks to NTT Data. Their responses are summarized in Figure 21.

Figure 21: Whether FTSP requested a reduction in connection fees

Answer	FTSPs
Requested one or more banks for a reduction	2 (33.3%)
Requested no banks for a reduction	4 (63.7%)
Number of respondents	6

Source: Compiled by the JFTC from the responses to the paper-based survey of FTSPs

The JFTC asked the FTSPs that answered “asked one or more banks for a reduction” in Figure 21 about the responses from the banks. Their responses are summarized in Figure 22.

Figure 22: A reduction, in connection fees, if any, in response to requests from FTSPs

Answer	FTSPs
One or more banks reduced the fees	2 (100%)
No banks reduced the fees	0 (0.0%)
Total	2

Source: Compiled by the JFTC from the responses to the paper-based survey of FTSPs

The JFTC asked the FTSPs that answered “requested one or more banks for a reduction” in Figure 21 whether the banks adequately

explained the reason. Both FTSPs answered they “felt that all banks did not adequately explain the reason.”

The JFTC asked registered non-bank code payment providers and banks the status of negotiations to reduce connection fees. Their responses are summarized below:

<Status of negotiations to reduce connection fees>

(Registered non-bank code payment providers)

- When CAFIS fees were reduces, we did not actively negotiate with banks for a reduction in connection fees. When banks asked for an increase in connection fees, we negotiated a fee freeze with them, citing the reduction in CAFIS fees.
- One certain bank offered us a discount equal to the reduction in CAFIS fees. No other banks made such an offer.
- There seems to be no way to negotiate a reduction with banks without knowing what portion of the banks’ security costs are passed on to the cost of their transactions with FTSPs like us.

(Banks)

- We do not offer a reduction in connection fees just because CAFIS fees have been reduced. However, if non-bank code payment providers ask for lower fees, we will seriously consider such a request.
- In recent years, we have worked to strengthen our security and monitoring, which has increased our internal costs. However, as an online bank, we pass on the entire CAFIS fee reduction to non-bank code payment providers to promote digitalization and facilitate cashless payments.

The JFTC asked banks and experts why banks could not comply with requests to reduce connection fees. Excerpts from their responses are provided below:

<Reasons why banks could not comply with requests to reduce connection fees>

(Banks)

- Reduced CAFIS fees help us reduce costs, but the total increase in anti-money laundering (hereinafter referred to as “AML”) and monitoring costs is largely equal to the amount of the reduction. This makes it difficult to reduce connection fees. The costs of maintaining the payment infrastructure, especially AML costs, are increasing as if to compensate for the reduction in CAFIS fees.

- CAFIS fees represent only a fraction of the costs associated with connectivity. A reduction in such fees does not benefit us much. Connections to non-bank code payment providers largely incur more costs than benefits. The reduction in CAFIS fees does not simply mean that we can now afford to reduce connection fees.

- The reduction in CAFIS fees does not simply allow us to reduce connection fees we charge to non-bank code payment providers. We have incurred unanticipated costs, most notably the costs of enhancing security following the account breaches that came to light around September 2020.

- The annual cost of authentication and other costs is now several hundred thousand yen more than in previous surveys.

- In addition to the CAFIS fees, there are other costs associated with the connections. These include the cost of IVR authentication[65], which is several yen per transaction and amounts to several tens of thousands of yen per month. These additional costs offset the amount of the reduction in CAFIS fees.

(Experts)

[65] IVR stands for Interactive Voice Response. IVR authentication is an authentication system based on interactive voice response over the telephone.

- AML and security costs for banks will go up, not down. The only solution may be to share the burden between banks and their clients according to their ability to pay.

As noted above, many banks cited increases in AML costs[66] and security-related costs as reasons why they could not accept a reduction in connection fees[67].

The JFTC asked banks about the ratio between “the amount of CAFIS fees paid by banks to NTT Data” and “the amount of connection fees paid by code payment providers to banks.” Their responses are summarized in Figure 23.

[66] On October 13, 2022, the Japanese Bankers Association announced that it had established a corporation aimed at streaming and integrating AML/CFT (countering the financing of terrorism) operations (https://www.zenginkyo.or.jp/news/2022/n101302/ [in Japanese]). This and other initiatives are expected to make AML/CFT operations more efficient, thereby preventing AML costs from soaring.

[67] According to these banks, the levels of AML/CFT measures required of financial institutions is increasing every year, reflecting the need to comply with international standards developed by the Financial Action Task Force on Money Laundering (FATF), a multilateral framework tasked with formulating international standards for measures against money laundering and terrorism financing (FATF Recommendations) and conducting peer reviews of performance against these standards.

Figure 23: Ratio between "the amount of CAFIS fees paid by banks to NTT Data" and "the amount of connection fees paid by code payment providers to banks" (in percentage)

Answer	Until September 30, 2020		From October 1, 2020 onward	
	Number of respondents	Percentage	Number of respondents	Percentage
Less than 5%	0	0.0%	1	1.0%
5–10% (exclusive)	16	14.7%	47	46.5%
10–20% (exclusive)	11	10.1%	20	19.8%
20–30% (exclusive)	39	35.8%	5	5.0%
30% or more	15	13.8%	13	12.9%
Others[68]	28	25.6%	12	11.9%
Number of respondents	109		101	

Source: Compiled by the JFTC from the responses to the paper-based survey (of banks)

Following the reduction in CAFIS fees in October 2020, the ratio between "the amount of CAFIS fees paid by banks to NTT Data" (numerator) and "the amount of connection fees paid by code payment providers to banks" (denominator) has largely declined significantly. The connection fees (denominator) have not been reduced, indicating that the relative amount of CAFIS fees (numerator) has decreased.

(c) Costs paid by non-bank code payment providers to retail payment infrastructure providers

According to the Code Payments Report, the paper-based survey of FTSPs and the interview survey of registered non-bank code payment providers, non-bank code payment providers pay retail payment infrastructure providers an initial cost in the form of an installation fee as well as an ongoing cost in the form of a fixed fee or a service

[68] These include "connection fees depend on the code payment providers" and "enable calculation."

usage fee based on the number of transactions. The unit amount of each of these fees has remained unchanged since the previous surveys. However, as the number of transactions increases, these pay-as-you-go service fees increase.

<Changes in fees since previous surveys>

(Registered non-bank code payment providers)

- The unit amount of the fee we pay to retail payment infrastructure providers has not changed. However, an increasing number of transactions means that the total amount we pay as a service usage fee is increasing.

B. Costs paid by non-bank code payment providers to banks for the use of read-write APIs

Both the paper-based and interview surveys of FTSPs and banks show that non-bank code payment providers pay banks nothing to several million yen in initial costs, and several to tens of yen per connection in ongoing costs.

(3) Paycheck deposits into FTSP accounts

To date, paychecks may not be deposited, even partially, into FTSP accounts and the like; paychecks may only be deposited in the form of currency (cash) into bank accounts and cash management accounts that meet certain requirements.[69] As such, the Code Payments Report states, “[I]f nonbank code payment providers registered as fund transfer service provider were able to receive users' wages or other source of income directly to their own accounts, then they would be able to provide users with code payment without connecting to bank accounts.” It also states, “Since at present the government is considering permitting payment of wages to fund transfer service providers, from a competition-policy perspective, it can be considered that permitting payment of wages to accounts with fund transfer service providers would have a desirable effect on securing an

[69] See footnote 49.

equal footing in competitive conditions between banks and nonbank code payment providers that provide code payment services."

On June 7, 2022, the Cabinet approved a policy document entitled "Grand Design and Action Plan for a New Form of Capitalism" and its appendix "Follow-up." The appendix states, "Regarding the payment of wages to the accounts of funds transfer business operators, we will establish schemes such as a guarantee system in which a sufficient amount is provided at an early stage in the event of bankruptcy of the fund transfer business operator, so that workers can be protected by ensuring wage payments. Such schemes will be institutionalized promptly in FY2022 in consultation with labor management groups." The Committee of Labor Conditions of the Labor Policy Council at the Health, Labor and Welfare Ministry explored ways to institutionalize such schemes while hearing the opinions of workers, employers, and fintech-related industry associations. This led to the issuance of the Ministerial Order Partially Amending the Ordinance for Enforcement of the Labor Standards Act (hereinafter referred to as "the Ministerial Order Amending the Ordinance for Enforcement of the Labor Standards Act"). The ministerial order provides, among other things, that an employer may, with the consent of the worker, pay the worker's wages to his or her account at an FTSP as defined in Article 2, paragraph (3) of the Payment Services Act, in which provides Type II funds transfer services as defined in Article 36-2 paragraph (2) of the same Act, if the FTSP is designated by the Minister of Health, Labor and Welfare as an FTSP that meets the following requirements. This ministerial order, which was promulgated on November 28, 2022, will take effect on April 1, 2023.

(Designation requirements)

(i) The FTSP has set the upper limit of the balance of the account into which wages are paid (hereinafter referred to as "the account balance") at one million yen, or measures to reduce the balance promptly to one million yen or less if it exceeds one million yen.
(ii) The FTSP has established that if the worker has difficulty in receiving the account balance due to the FTSP's bankruptcy or other reasons, the FTSP will repay the worker the entire amount of the account balance.

(iii) The FTSP has a mechanism in place to ensure that if the account balance is lost due to an illegal funds transfer transaction against the worker's will or for any other reason not attributable to the worker, the FTSP will compensate for the worker for the loss.

(iv) The FTSP has implemented measures to ensure that the worker can receive the account balance for at least ten years from the date of the last change in the account balance, except in exceptional circumstances.

(v) The FTSP has implemented measures to ensure that funds transfers can be made to the account to which wages are paid in increments of one yen.

(vi) The FTSP has implemented measures to ensure that the worker can receive wages with the smallest unit being one yen with means to receive wages in currency, such as the use of an ATM, and that he or she can receive wages at no cost to his or her, such as not having to pay an ATM fee, at least once a month.

(vii) The FTSP has a system for informing the Minister of Health, Labor and Welfare, as appropriate, of its performance in carrying out operations related to the payments of wages and of its financial status.

(viii) The FTSP has sufficient social credibility as well as the technical capacity to execute wage payment operations properly and securely.

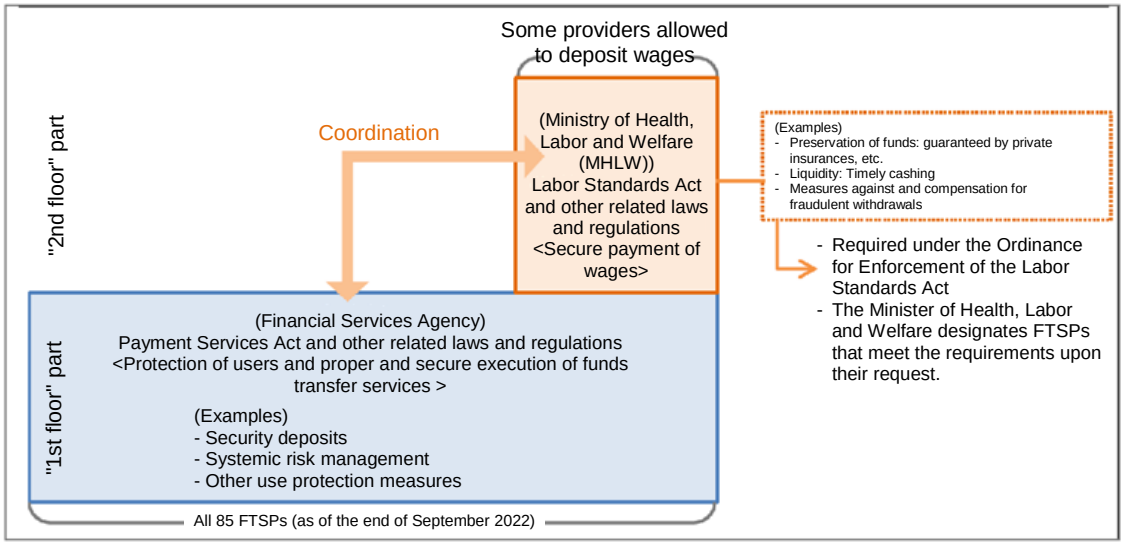
Figure 24: Types of FTSPs under the Payment Services Act

	Type I	Type II	Type II
Number of registered FTSPs (As of December 31, 2022)	0	83	0
Subject to licensing or registration?	Licensing	Registration	Registration
Upper remittance limit	None	1 million yen per remittance	50,000 yen per remittance
Retention of user funds[70]	Generally prohibited (Required to send funds immediately upon receipt)	Allowed (However, the FTPS must have a structure in place to prevent the retention of funds unrelated to remittance when it receives a remittance of one million yen or more.)	Allowed (However, the maximum amount of money received per user is 50,000 yen.)
Methods of preserving user funds	The total amount is preserved with deposits or guarantee / trust property		Same as in the left box; deposit management is also possible.

Source: Compiled by the JFTC from the website of the Financial Services Agency

[70] Financial regulators restrict the retention of user funds whose use for funds exchange transactions is doubtful and deemed to cause problems. For example, if an FTSP goes bankrupt while retaining user funds, it will take long time for users to recover those funds, which will negatively affect user protection.

Figure 25: Outline of Paycheck deposits FTSP accounts



Source: Translated by JFTC from the website of the Ministry of Health, Labor and Welfare (MHLW)

In view of the designation requirements described above, to make paycheck deposits into FTSP accounts a reality, it is necessary to allow the transfer of account balances from FTSP accounts to bank accounts.

The JFTC asked all FTSPs, including registered non-bank code payment providers, whether they would like paychecks to be deposited into their accounts. Their responses are summarized in Figure 26.

Figure 26: Whether FTSPs want paychecks deposited into their accounts

Whether FTSPs want paychecks deposited into their accounts	FTSPs
Want	15 (34.9%)
Don't want	8 (18.6%)
Undecided or considering	20(46.5%)
Number of respondents	43

Source: Compiled by the JFTC from the responses to the paper-based survey of FTSPs

The JFTC asked the FTSPs that said they wanted their paychecks deposited into their accounts why. Excerpts from their responses are provided below:

<Reasons why FTSPs want paychecks deposited into their accounts>

(FTSPs)

- The ability to deposit paychecks directly into our account means more options for users to get paid. We expect that users will make more such deposits as well as payments using our account.
- Users (workers) who want to use our account will no longer need to deposit money from their bank accounts into our account. This will greatly improve user convenience. In addition, the elimination of charging process allows us to reduce the amount of costs we pay to banks.

The JFTC also asked FTSPs and industry associations about their concerns regarding paycheck deposits into FTSP accounts. Excerpts from their responses are provided below:

<Concerns about paycheck deposits into FTSP accounts>

(FTSPs)

- We are concerned that we will have to pay not only the costs associated with assets preservation requirements of the Payment Services Act, but also the guarantee fees to the credit guarantee institutions (double burden of costs).
- We are concerned about the cost of system design and remediation required to meet the system specifications (who bears what portion of the costs).
- Businesses registered as FTSPs are all type II FTSPs, which are required to ask a user whose liability in funds transfer transactions exceeds one million yen about the usage of such transactions (retention restriction). However, if the practice of depositing paychecks into FTSP

accounts becomes common, a significant number of users are likely to retain more than one million yen.

- FTSPs must meet a number of requirements to protect workers. For example, they are required to disburse the portion exceeding one million yen within the day if an such excess occurs. They are also required to ensure that paychecks deposited into their accounts can be withdrawn to users' bank accounts or ATMs. These requirements are designed for users who do not use electronic services. Requirements that do not meet the needs of users who choose to use electronic means, paycheck depositing into FTSP accounts, should be reconsidered.

- FTSPs are required to allow users to withdraw money once a month at no cost, even in months when their paychecks are not deposited. They are also required to obtain Privacy Mark certification. Banks are not bounded by these restrictions. We believe that this scheme is designed to strictly apply the principle of paying wages to users in cash, rather than to meet their needs.

(Industry associations)

- In December 2022, the Council for Promotion of Regulatory Reform published the "Interim Report on the Promotion of Regulatory Reform." According to the report, regulatory authorities should review potential problems two-years after the launch of the scheme. Such a review should examine whether the rules are really wanted by users. The framework in which paychecks are deposited into FTSP accounts should be developed to create an environment in which FTSPs can compete independently of banks. However, the labor regulations effective force FTSPs to cooperate with banks. This is an inadequate competitive environment.

(4) Consideration in light of Competition Policies

A. Pricing of retail payment infrastructure fees, etc.

(a) Pricing of retail payment infrastructure fees

The Code Payments Report states, "[I]n consideration that CAFIS effectively is essential infrastructure to account charging or linking and the volume of such transactions is increasing, it would be desirable, from a competition-policy perspective, for these to be set appropriately through negotiation with user businesses." In October 2020, NTT Data reduced CAFIS fees from a maximum of 3.15 yen per transaction to one yen, citing the increasing volume of account charging or linking via CAFIS[71].

Currently, non-bank code payment providers have two options for performing account charging or linking from bank accounts: the Instant Account Payment Service, which uses CAFIS, as noted in Section 2, (1), C.; and read-write APIs. In the future, they will likely have additional options that allow for account charging or linking from bank accounts. These options will use, among others, the Zengin System instead of CAFIS. However, banks have already implemented retail payment infrastructure that use CAFIS. Non-bank code payment providers who want to switch their retail payment infrastructure to other means will have to bear high initial costs, including system development costs. Participation in the Zengin System is also an issue for future consideration. As it stands, CAFIS effectively remains a de facto essential infrastructure.

As such, reduction in CAFIS fees can lead to a reduction in both connection fees charged by banks to non-bank code payment providers and the service fees charged to rate members by

[71] The Code Payments Report states, "[S]ince transaction volumes are increasing steadily for credit card operational services as well, and metered fees per data processing for such services also appear to have remained unchanged for 10 years or longer, it is conceivable that it would be desirable to set appropriate charges for credit card operational services as well from a competition-policy perspective." This led to changes to CAFIS fees in October 2020 and January 2023.

merchants, thereby contributing to the promotion of cashless payments.

Meanwhile, it appears that some banks have not yet reduced the connection fees they charge to non-bank code payment providers by the amount of the CAFIS fees reduction. This is largely due to the increases in AML and security costs incurred by banks. It also appears that, as noted in Section, (2), A, (b), non-bank code payment providers believe that banks that do not accept a reduction in connection fees are not adequately explaining the costs incurred by banks in connection with account fees and other transactions. Therefore, if a bank is to reflect the costs it incurs in transactions with non-bank code payment providers in the connection fees it charges, it should preferably explain to them the rationale for charging connection fees.

(b) Effective use of read-write APIs

The Code Payments Report states, “It would be desirable, in order to increase competitive pressure on retail payment infrastructure connected to bank systems, to promote efforts to develop an environment in which it would be easy for nonbank code payment providers to use Read/Write APIs.” The survey found that the majority of the responding banks are already moving towards the implement read-write APIs.

However, as noted in Section (1), C, (b), despite a significant need for read-write APIs, no significant progress has been made in the use of read-write API connections by banks as well as non-bank code payment providers and EPSPs (hereinafter collectively referred to as “non-bank code payment and other providers”). There is a significant need for read-write APIs for two main reasons. First, they allow for lower development costs than CAFIS. Second, they can result in a shorter development time if a one-time development makes it possible to connect to two or more banks. However, read-write API connections are not widely used for two main reasons. First, the specifications of read-write APIs are not uniform, creating a huge

burden of having to deal with each API. Second, the features of read-write APIs that banks have in place are not always consistent with what non-bank code payment and other providers want.

This state of affairs points to the need to develop an enabling environment for non-bank code payment and other providers to readily use read-write APIs, thereby increase competitive pressure on retail payment infrastructure. In order to address this need, a number of measures should preferably be taken. These include (1) establishing a forum to unify the specifications of read-write APIs with the participation of the relevant organizations; (2) disclosing the set of read-write APIs that banks themselves have in place; (3) identifying the division responsible for read-write API connections at each bank;[72] (4) identifying what non-bank code payment and other providers want from read-write APIs; and (5) developing and using a mechanism to match the needs of banks with those of non-bank code payment and other providers.

B. Paycheck deposits into FTSP account

As noted in Chapter 4, Section 3 of the Code Payments Report, a significant percentage of users prefer to have their paychecks deposited into an FTSP's account. If the Ministerial Order amending the Ordinance for Enforcement of the Labor Standards Act comes into effect on April 1, 2023, and allows paychecks to be deposited into the account of FTSPs, this will have a positive impact on improving user convenience.

Therefore, it is desirable for non-bank code payment providers to consider what can be done to ensure interoperability, taking into account user needs.

When it becomes possible to deposit paychecks into the account of an FTSP, challenges may arise, such as the slow entry of FTSPs into the market, unless there is a level playing field where banks offering code

[72] It is also desirable to specify the division responsible for read-only APIs at banks, not least to encourage new entrants.

payment services and non-bank code payment providers compete on an equal footing, despite the differences in the regulatory framework between banks and FTSPs. Therefore, it is appropriate for relevant ministries and agencies to assess the needs of users who wish to deposit their paychecks into the accounts of FTSPs and work to resolve any problems that may arise. The JFTC continues to monitor the situation.

3. Payment Flow to Member Merchants (Deposit Transfer Transactions)

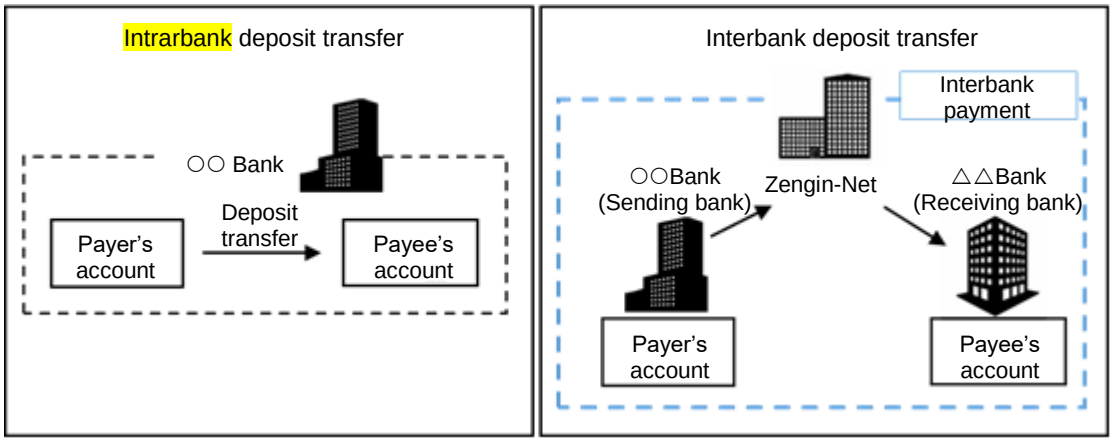
(1) Overview of payment flow to member merchants (deposit transfer transactions)

A non-bank code payment provider disburses sales proceeds to a member merchant’s bank account by submitting a deposit transfer request to an intermediary bank. If the member merchant has an account with the intermediary bank to which the nonbank code payment provider’s request was submitted, the disbursement of sales proceeds is completed when the bank transfer funds between itself both the nonbank code payment provider’s account and the member merchant’s account (hereinafter referred to as "intrabank deposit transfers"). If, on the other hand, the member merchant has an account with a bank that is different from the intermediate bank to which a nonbank code payment provider has submitted a request for deposit transfer, funds must be transferred between the intermediate bank to which the nonbank code payment provider has submitted a request for a deposit transfer and the member merchant's bank (hereinafter referred to as "interbank deposit transfer," the bank that sends funds in an interbank deposit transfer is referred to as the "sending bank" and the bank that receives funds is referred to as the "receiving bank"). When an interbank deposit transfer is executed, funds are moved between the sending bank and nonbank code payment provider and between the receiving bank and the member merchant, and a payment of funds is also executed between the sending bank and the receiving bank (hereinafter referred to as "interbank payment").

The transaction rules, system infrastructure (including computers and networks), risk-management systems and other elements developed to facilitate the interbank payment process in an interbank deposit transfer are collectively referred to in this report as the "fund payment system."

In interbank deposit transfers, the Domestic Funds Transfer System operated by Zengin-Net is used as the funds payment system. The Zengin System operated by Zengin-Net is used as the interbank network system to operate the Domestic Funds Transfer System.

Figure 27: Differences between intrabank deposit transfers and interbank deposit transfers



Source: Code Payments Report

(2) Interbank fees and Domestic Funds Transfer System Operational Costs

A. Replacement of interbank fees with Domestic Funds Transfer System Operational Costs

The Code Payments Report states that as of April 2020, interbank fees[73] are to be set by mutual negotiation between banks; the interbank fees set by all banks that responded to a questionnaire administered to banks were 117 yen (excluding tax) for deposit transfers of less than 30,000 yen and 162 yen (excluding tax) for deposit transfers of 30,000 yen or more. According to this report, an interview survey of banks

[73] Fees paid from the sending bank to the receiving bank in an interbank payment via the Zengin System.

found no cases in which interbank fees were higher or lower than these levels since at latest February 1979. It also found no instances in which any of these banks negotiated to change the level of interbank fees.

In light of these circumstances, the Code Payments Report states: "While domestic fund transfer regulations stipulate that interbank fees-which constitute one of the costs arising in interbank payment-are to be determined through mutual negotiation between the sending bank and the receiving bank, since February 1979 at the latest, their amounts have been fixed at levels much higher than the actual administrative costs arising. [...] Efforts should be made to rectify the current situation under which interbank fees have been maintained for many years at levels greatly exceeding the actual administrative costs incurred by individual banks, while considering whether or not interbank fees truly are necessary and fulfilling suitable accountability requirements with regard to the levels at which they are set and the grounds thereof." The Action Plan of the Growth Strategy (Cabinet Decision of July 17, 2020) states that "[I]nter-bank fees, which account for a considerable portion of the costs behind bank transfer fees and having not changed for more than 40 years, should be reviewed."

In response to the above recommendations and policy directions, Zengin-Net has decided to replace interbank fees with the fee called "Domestic Funds Transfer System Operational Costs," effective October 1, 2021.

B. How to calculate Domestic Funds Transfer System Operational Costs

Zengin-Net states that it calculates the "Domestic Funds Transfer System Operational Costs" fee as consisting of the costs of operating funds transfer transactions at the receiver's end[74] (hereinafter referred to as "receiver's operating costs") and the profit margin necessary to maintain the funds transfer business at the receiving banks (hereinafter

[74] This process at receiving banks includes, but is not limited to, receiving transfer messages, depositing funds to payee accounts, and returning transferred funds.

referred to as “transfer profit margin”). This fee is set at 62 yen (excluding tax) per funds transfer transaction[75].

In order to calculate the receiver’s operational costs, Zengin-Net surveyed its member banks on the costs involved, including the costs of operating funds transfer transactions at the receiver’s end, as well as system costs, personnel and non-personnel costs, Zengin System costs, and other costs needed to improve the security and convenience of such operations. Then Zengin-Net divided the total amount of all these costs by the total number of funds transfer transactions. The result was 50 yen. To calculate the transfer profit margin, Zengin-Net referred to the Basic Survey of Business Structure and Activities conducted by the Ministry of Economy, Trade and Industry (METI).[76] The result was 12 yen.

The amount of Domestic Funds Transfer System Operational Costs is subject to review every five years to keep it at a reasonable level under normal social conventions, after recalculating receiver’s operational costs and the transfer profit margin.

[75] Because receiver’s operational costs are independent of the type and amount of funds transfer transactions, Zengin-Net generally sets the Domestic Funds Transfer System Operational Costs at a flat rate. However, the payment of salaries and bonuses in accounts are outside this scope (free of charge). The idea is to ensure that the setting of Domestic Funds Transfer System Operational Costs does not affect the convenience of payees (workers), taking into account the fact that, under Labor Laws, the transfer of wages paid by an employer to an worker's bank account is accepted as an exception to the payment of wages in cash (Article 24 of the Labor Standards Act and Article 7-2 of the Ordinance for the Enforcement of the Labor Standards Act).

[76] The idea behind the use of the METI survey is that receiving banks, like ordinary companies, need to secure a certain profit margin in order to maintain the funds transfer business while covering the costs needed for future investment, and that the average profit margin for ordinary companies as a whole should therefore constitute “Domestic Funds Transfer System Operational Costs.”

Figure 28: *Interbank fees* and *Domestic Funds Transfer System Operational Costs*, which are part of the costs of an Interbank payment

	Interbank fees (Until the end of September 2021)	"Domestic Funds Transfer System Operational Costs" (From October 1, 2021)
Less than 30,000 yen	117 yen (tax excluded)	62 yen (tax excluded)
30,000 yen or more	162 yen (tax excluded)	

Source: Compiled by the JFTC from various open sources

(3) Transfer fees paid by code payment providers to banks

A. Amounts

Transfer fees are set separately for individual customers and business customers, and their amounts are often published on bankers' websites. Apart from these figures on bankers' websites, transfer fees may be determined through mutual negotiations between businesses and banks. When requesting funds transfers, many non-bank code payment providers negotiate with banks to set transfer fees[77].

B. Differentiation

Transfer fees are often differentiated based on the standard transfer amount, which is usually 30,000 yen. In such cases, different fees are charged for a transfer of 30,000 yen or more and for a transfer of less than 30,000 yen. This survey found that some banks apply a uniform transfer fee regardless of the amount transferred.

[77] Some non-bank code payment providers use payment agents which act as intermediaries between businesses and payment institutions to provide payment services. Payment agents negotiate transfer fees with banks on behalf of these non-bank code payment providers.

Figure 29: Whether the transfer fee is differentiated depending on the amount transferred

Answer	Number of banks
Differentiate	88 (64.7%)
Do not differentiate	32 (23.5%)
Others[78]	16 (11.8%)
Number of respondents	136[79] (100%)

Source: Compiled by the JFTC from the responses to the paper-based survey (of banks)

The JFTC asked the banks that answered "differentiate" in Figure 29 why they differentiate transfer fees depending on the amount transferred. Their responses are summarized in Figure 30.

Figure 30: Why some banks differentiate transfer fees depending on the amount transferred

Answer	Number of banks
We continue to apply differentiated transfer fees as we did when interbank fees were applied	64 (83.1%)
The cost to us varies depending on the amount transferred	11 (14.5%)
Others	1 (1.3%)
Number of respondents	76

Source: Compiled by the JFTC from the responses to the paper-based survey (of banks)

The JFTC asked the banks that answered "differentiate" in Figure 29 why they do not reconsider the differentiation of transfer fees. Excerpts from their responses are provided below:

[78] These include "do not differentiate only for IB," and "differentiate for services for business entities."

[79] The number exceeds 120, the total number of banks that responded, because some banks responded more than once.

<Why some banks do not reconsider the differentiation of transfer fee>

(Banks)

- We continue to differentiate transfer fees at the 30,000 yen threshold even after the introduction of the Domestic Funds Transfer System Operational Costs, as convergence of transfer fees would result in huge system costs.
- We set transfer fees by examining by considering a comprehensive range of factors, including not only costs but also our management strategies on issues such as promoting digitalization and cashless payment. Removing the differentiation of transfer fees based on the amount of transferred will not necessarily lead to a decrease in transfer fees; it may even increase them. We have not reconsidered the fees out of consideration for a possible negative impact on customers.
- We have not reconsidered the current differentiation of transfer fees because if we were to change the fees based on administration costs, the fee for a transfer of less than 30,000 yen would need to be raised substantially.

The JFTC asked the banks that answered “do not differentiate” in Figure 29 why they do not differentiate transfer fees depending on the amount transferred. Excerpts from their responses are provided below:

<Why some banks do not differentiate transfer fees depending on the amount transferred>

(Banks)

- Since system and personnel costs do not vary based on the amount transferred, we did not see a need to differentiate transfer fees. Therefore, we have eliminated the differentiation of such fees.
- We are an online bank, which means that there is no difference in transfer costs regardless of the amount transferred. For this reason, we adopt a single transfer fee.

(4) Costs of a funds transfer from the sending bank to the receiving bank

The JFTC asked banks how much it costs to transfer funds from the sending bank to the receiving bank other than the Domestic Funds Transfer System Operational Costs. Their responses are summarized in Figure 31–Figure 33

Figure 31: Transfer costs other than Domestic Funds Transfer System Operational Costs (IB)

Cost range	Number of banks
Less than 10 yen	4 (3.2%)
10–30 yen (exclusive)	18 (14.3%)
30–50 yen (exclusive)	13 (10.3%)
50–100 yen (exclusive)	25 (19.8%)
100 yen or more	26 (20.6%)
Unknown/others[80]	40 (31.7%)
Number of respondents	126[81]

Source: Compiled by the JFTC from the responses to the paper-based survey (of banks)

[80] These responses include “we do not make calculations for each channel.”

[81] The number exceeds 120, the total number of banks that responded, because some banks responded more than once.

Figure 32: Transfer costs other than Domestic Funds Transfer System Operational Costs (ATM)

Cost range	Number of banks
Less than 10 yen	1 (0.8%)
10–50 yen (exclusive)	16 (13.2%)
50–100 yen (exclusive)	11 (9.1%)
100–150 yen (exclusive)	11 (9.1%)
150 yen or more	31 (25.6%)
Unknown/others[82]	51 (42.1%)
Number of respondents	121[83]

Source: Compiled by the JFTC from the responses to the paper-based survey (of banks)

Figure 33: Transfer costs other than Domestic Funds Transfer System Operational Costs (at bank counter)

Cost range	Number of banks
Less than 10 yen	0 (0.0%)
10–50 yen (exclusive)	3 (3.0%)
50–100 yen (exclusive)	2 (2.0%)
100–150 yen (exclusive)	4 (4.0%)
150 yen or more	47 (47.0%)
Unknown/others[84]	44 (44.4%)
Number of respondents	100

Source: Compiled by the JFTC from the responses to the paper-based survey (of banks)

(5) Reconsideration of interbank fees and its effects

As mentioned in Section(2), A, the interbank fees has been replaced by the fee called “Domestic Funds Transfer System Operational Costs.” The

[82] These responses include “we do not handle transfers via an ATM.”

[83] The number exceeds 120, the total number of banks that responded, because one bank responded more than once.

[84] These responses include “we do not handle transfers at bank counter.”

amount of the new fee is uniformly set at 62 yen (excluding tax), down from 117 yen (excluding tax) for a transfer of less than 30,000 yen and 162 yen (excluding tax) for a transfer of 30,000 yen or more. unless these circumstances, the JFTC asked banks whether they were reducing transfer fees as a result of interbank fees by the Domestic Funds Transfer System Operational Costs. Their responses are summarized in Figure 34.

Figure 34: Whether banks reduced transfer fees as a result of interbank fees with Domestic Funds Transfer System Operational Costs

Answer	Number of banks
Reduced	112 (95.0%)
Did not reduce	6 (5.0%)
Number of respondents	118

Source: Compiled by the JFTC from the responses to the paper-based survey (of banks)

JFTC asked the banks that answered “reduced” in Figure 34 to what extent they reduced transfer fees by transfer method. Their responses are summarized in Figure 35.

Figure 35: The extent to which transfer fees were reduced by method (The number indicates the number of banks)

	IB	ATM	At bank counter
Less than 10 yen	1	2	3
10–50 yen (exclusive)	0	0	0
50 yen or more	75	35	40
Others[85]	36	70	64

Source: Compiled by the JFTC from the responses to the paper-based survey (of banks)

The difference between the interbank fees and the Domestic Funds Transfer System Operational Costs is 55 yen for a transfer of less than 30,000 yen and 100 yen for a transfer of 30,000 yen or more. In addition,

[85] These responses include “we do not handle transfers at bank counters or via an ATM,” and “the amount of reduction change at the threshold of 30,000 yen.”

many banks answered that they had reduced transfer fees by 50 yen or more for all transfer methods. These two facts suggest that in many cases the amount of reduction is at least equal to the difference for a transfer of less than 30,000 yen.

The JFTC asked the banks what other effects the replacement of interbank fees by “Domestic Funds Transfer System Operational Costs” had besides the reduction in transfer fees. Excerpts from their responses are provided below:

<Effects of the replacement of interbank fees with the Domestic Funds Transfer System Operational Costs, apart from the reduction of transfer fees>

(Banks)

- As a result of the replacement of interbank fees by Domestic Funds Transfer System Operational Costs, our revenues as a receiving bank dropped by several tens of million yen.
- It is not that we cannot cover the costs of receiving funds transfers as a result of interbank fees being replaced by Domestic Funds Transfer System Operational Costs. However, our revenues simply decreased. The replacement was a serious blow to banks that, like us, have to make profit.
- Our revenues dropped because we receive more transfers than we send.
- Our revenues dropped by hundreds of millions of yen.
- Replacing the interbank fees with the Domestic Funds Transfer System Operational Costs had little effect.

(6) Consideration in light of Competition Policies

The Code Payments Report states, “This fact [that many countries do not have fees corresponding to interbank fees] too would imply, from the perspective of competition policy, that efforts should be made to rectify the

current situation under which interbank fees have been maintained for many years at levels greatly exceeding the actual administrative costs incurred by individual banks, while considering whether or not interbank fees truly are necessary and fulfilling suitable accountability requirements with regard to the levels at which they are set and the grounds thereof." In response to this and other suggestions, on October 1, 2021, Zengin-Net replaced the interbank fee with the "*Domestic Funds Transfer System Operational Costs,*" a fee of 62 yen per transfer, of which 50 yen reflect the cost incurred by the receiving bank (receiver's operational cost) and the remaining 12 yen corresponds to the profit margin for funds transfer business.

As shown in Figure 34 (Whether banks reduced transfer fees as a result of interbank fees being replaced by Domestic Funds Transfer System Operational Costs), most banks reduced transfer fees as a result of interbank fees had being replaced by Domestic Funds Transfer System Operational Costs. The amount of reduction seems to reflect the difference between interbank fees and Domestic Funds Transfer System Operational Costs, as shown in Figure 35 (The extent to which transfer fees were reduced by method).

Thus, it is safe to say that Zengin-Net and many banks have made easily made progress in their efforts to facilitate cashless payment, as suggested in the Code Payments Report (Recommendation 3: Review transaction practices in relation to interbank fees [as mentioned earlier in Chapter 2, Section 1]).

However, some banks continue to charge different transfer fees even after transfer fee was uniformly set at 62 yen as Domestic Funds Transfer System Operational Costs, which is a reduction from 117 yen for a transfer of less than 30,000 yen and 162 yen for a transfer of 30,000 yen or more. They give three main reasons. First, they say they are follow the convention of maintaining differentiated transfer fees as they were when interbank fees were applied. Second, they argue that converging transfer fees would entail huge system costs. Third, they claim that convergence of interbank fees will not necessarily lead to their reduction and might even push them up.

In this regard, maintaining the differential fees from the time of the interbank fees without careful consideration can keep transfer fees high and prevent non-bank code payment providers and member merchants from reducing their disbursement costs. This practice, in turn, may maintain the frequency with which funds are transferred from the accounts of cashless payment service providers to those of member merchants, thereby compromising convenience for member merchants.

Therefore, banks that, without good reason, maintain differential transfer fees as a continuation of the practice when interbank fees were applied should consider the possibility of changing this practice, while giving due consideration to the implications of standardizing transfer fees, including the cost of system remediation and the impact on their customers.

4. Initiatives Taken by Zengin-Net

(1) Actions toward strengthening the governance structure of Zengin-Net and ensuring transparency of transactions

As mentioned in Section 3, (1), the Domestic Funds Transfer System operated by Zengin-Net is used as the funds payment system for interbank deposit transfers. The Zengin System operated by Zengin-Net is used as an interbank network system for operation of the Domestic Funds Transfer System. However, an inadequate governance structure of Zengin-Net and insufficient transparency of its transactions prompted the Code Payments Report to state, “[I]t would be desirable for Zengin-Net to develop and enhance a governance structure capable of fully reflecting the needs of end users of the system, in view that the structure affects the deposit transfer used by end users, and to secure transparency in transactions conducted using it.” In response to this suggestion, Zengin-Net established the Task Force for the Next-Generation Payment Systems, which is composed of various stakeholders. Under this task force, Zengin-Net also established the Working Group for the Next-Generation Payment Systems. (The task force and the working group are hereinafter referred collectively to “the Study Groups”). Building on the efforts of the Study Groups, Zengin-Net is committed to a number of actions, including (i) enhancing dialogue with various stakeholders; (ii) improving information dissemination through

external communication of such information as the cost of funds transfer transactions per transfer, the method and practice of sharing the cost of participation in the Zengin System, the amount of "Domestic Funds Transfer System Operational Cost," and how it is calculated; and (iii) strengthening cooperation with participants in the Zengin System.

The JFTC asked all FTSPs, including banks and registered non-bank code payment providers, how they evaluate Zengin-Net's actions to strengthen the governance structure of Zengin-Net and ensure transparency of transactions. Excerpts from their responses are provided below:

<Evaluation of Zengin-Net's actions to strengthen the governance structure of Zengin-Net and ensure transparency of transactions>

(Banks)

- We understand that Zengin-Net has established a task force and working groups composed of FTSPs and many other stakeholders and experts to disclose information.

- We understand that Zengin-Net has established the Task Force for the Next-Generation Payment Systems to discuss how to address issues with the cost structure of Domestic Funds Transfer Systems. We also understand that Zengin-Net has also created Domestic Funds Transfer System Operational Costs. We view these frameworks in a positive light. For our part, we are committed to building a fund transfer system that fully meets the needs of end-users while maintaining convenience and security.

(FTSPs)

- In the discussion process, Zengin-Net has shown its willingness to listen to what FTSPs have to say. We are satisfied with that.

(2) Progress in the discussion of how to open up access to the Zengin System to FTSPs

The Domestic Funds Transfer System was not open to FTSPs even if they were non-bank code payment providers that perform funds transfer transactions just like banks. This state of affairs prompted the Code Payments Report to state, “It would be desirable for Zengin Net to consider developing business requirements (legal qualifications), security standards, and conditions on the financial standing for businesses to join the Domestic Funds Transfer System and opening up access to fund transfer service provider that satisfy these standards.” This suggestion caused Zengin-Net to take action. As mentioned in (1), Zengin-Net, through the Study Groups, discussed how to make institutional and systemic improvements. The main objective was to simplify the qualifications for participation in the Zengin System to include FTSPs in 2022, while ensuring both the safety of the payment system and a level playing field where existing and new participants compete on an equal footing. On September 15, 2022, Zengin-Net announced its decision to relax the qualifications. This decision was implemented on October 7.

At their meetings in January 2023, the Study Groups set the policy to (i) start the development of a new API-based connection method (API gateway) that will reduce the connection burden for participants in the Zengin System, including FTSPs, with a view to launch this service in 2025 or 2026; and (ii) in principle, share the costs associated with API gateway connections among all participants, including banks, according to the number of transactions they conduct.

The JFTC asked experts about the future prospects of relaxing the qualifications for participation in the Zengin System to include FTSPs. Excerpts from their responses are provided below:

<Future prospects of relaxing the qualifications for participation in the Zengin System to include FTSPs>

(Experts)

- FTSPs should preferably be encouraged to participate in the Zengin System from the perspective of offering various services to end users and stimulating the competitive environment, while facilitating cashless payments, ensuring a level playing field and securing interoperability.
- Some FTSPs have do not felt the need to join Zengin System, as they have no small number of users through their own networks. Relaxing the participation qualifications for FTSPs may not lead to wider participation.
- A look at cases of opening of payment systems abroad suggests that such opening-up is unlikely to lead to immediate participation of many FTSPs. It should be noted that some time is needed to achieve wider participation. In the United Kingdom and Australia, for example, it took at least one or two years for FTSPs to participate in their respective central banks' payment infrastructure after the participation qualifications were relaxed to include them.
- FTSPs are not well aware of Zengin-Net's initiatives. It will take some time before they have a good understand of these efforts.

(3) Consideration in light of Competition Policies

A. Strengthen the governance structure of Zengin-Net and ensure transparency of transactions

As noted in (1) above, the JFTC concludes that Zengin-Net has undertaken a number of actions to strengthen its governance structure and ensure the transparency of its transactions, as suggested in the Code Payments Report (Recommendation 4: Strengthen the governance structure of Zengin-Net and ensure transparency of transactions [as mentioned earlier in Chapter 2, Section 1]). These measures include (i) strengthening dialogue with various stakeholders; (2) improving information dissemination by external communicating

information as the amount of the “Domestic Funds Transfer System Operational Cost” and how it is calculated; and (3) strengthening cooperation with Zengin System participants.

The JFTC hopes that Zengin-Net will continue its efforts to maintain such a governance structure and ensure transaction transparency.

B. Exploring ways to open up access to the Zengin System to FTSPs

As discussed in Chapter 4, Section 2, (2), C of the Code Payments Report, non-bank code payment providers incur costs such as (i) costs of negotiation with multiple banks for connection in the flow of receipts from users, as well as initial connection costs; and (ii) intermediary costs for deposit transfer requests to intermediary banks in the flow of disbursements to member merchants. These costs can be reduced if FTSPs start using the Zengin System.

As noted in (2) above, as suggested in the Code Payments Report (Recommendation 5: Explore ways to open up access to the fund payment system to fund transfer service providers [FTSPs] [as mentioned earlier in Chapter 2, Section 1]), Zengin Net has been studying how to open up access to the funds payment system to FTSPs. On October 7, 2022, Zengin-Net relaxed the qualifications for participation in the Zengin System to welcome FTSPs. It is now exploring ways to implement API gateway connections to facilitate connections, taking into account the needs of FTSPs.

The Working Group for the Next-Generation Payment Systems has recently set the policy to start the development of the API gateway in order to launch this service in 2025 or 2026, and in principle to share the related costs among all participants, including banks, according to the number of transactions they conduct.

The JFTC concludes that these actions by Zengin-Net will lead to greater interoperability and a level playing field where banks and non-bank code payment providers compete on an equal footing. Therefore,

JFTC finds that Zengin-Net's actions promote competition among code payment providers.

It is expected that FTSPs will consider, as appropriate, what can be done to facilitate the use the Zengin System in light of the costs and benefits involved. As noted above in Section 2, (3), FTSPs must meet a number of requirements in order to be designated as FTSPs that can receive wages in their users' accounts. One of these requirement states, "[T]he FTSP has set the upper limit of the balance of the account into which wages are paid at one million yen or implemented measures to promptly make the balance one million yen or less if it exceeds one million yen." In light of these requirements, balances must be transferred from FTSP accounts to bank accounts. This raises the prospects of a greater need for smooth funds transfers between FTSPs and banks from the perspective of user convenience.

Accordingly, Zengin-Net should preferably continue to reconsider the mode of operation as necessary to enhance convenience while ensuring both the safety of the payment system and a level playing field where banks and FTSPs compete on an equal footing.

The JFTC hopes that Zengin-Net will continue to explore ways to allow FTSPs to participate in the Zengin System in light of the planned introduction of a connection method based on an API gateway.

The JFTC will continue to monitor the situation.

Chapter 5: Institutional Arrangements and Transactional Practices Surrounding Open Banking in Other Countries

This report has so far focused on two types of services: (1) household accounting services provided by EPSPs, and (2) code payment services provided by code payment providers. In doing so, the report has identified the issues that need to be addressed in terms of both Antimonopoly Act and competition policy.

Chapter 5 presents the main findings of the survey on the institutional arrangements and transactional practices surrounding open banking in selected countries. *Open banking* is generally used as a catch-all term to refers to a mechanism that allows third-party financial service providers – including EPSPs and code payment providers – to access consumer data held by banks and other financial institutions in order to provide their own services to consumers. The survey was conducted to gain insights into how Japan can further facilitate innovation in the cashless sector.

1. Overview of Institutional Arrangements in the EU

In the EU, the Payment Services Directive 2[86] (hereafter referred to as "PSD2"), adopted in November 2015, provides a regulatory framework for payment services – including transactions between banks and fintech companies to obtaining account information – within the European Economic Area (EEA). The Payment Services Directive (PSD), the predecessor to PSD2, was adopted in November 2007 to standardize payments within the EU with the introduction of the Single Euro Payments Area (SEPA)[87]. Subsequent technological advances in the payment services market have led

[86] Directive (EU) 2015/2366 of the European Parliament and of the Council of 25 November 2015 on payment services in the internal market, amending Directives 2002/65/EC, 2009/110/EC and 2013/36/EU and Regulation (EU) No 1093/2010, and repealing Directive 2007/64/EC

[87] A payment processing scheme that has been created to enable cross-border electronic payments in the EU just like national payments in a fast, safe, and efficient way. It is now capable of money and account transfers. This means, for example, that people from other member states can pay by account transfers or invoice payments in their own countries, because retailers can directly debit accounts in other member states.

to the emergence of mobile payment services and non-banks services. PSD2 was adopted to bring these new services within the scope of the regulatory framework.

Figure 36: Payment service providers as defined in PSD2

	PSD			PSD2	
	Payment Service Providers (PSP)				
				Third-Party Providers (TPPs)	
	Banks	Electronic Money Institutions	Payment Service Providers	Payment Initiation Service Providers (PISPs)	Account Information Service Providers (AISPs)
Authorization/ Registration	Authorization				Registration
Lines of business	Payment account services Fund transfer services (incl. agency payments) Issuance & management of payment instruments (incl. credit cards) Issuance of electronic money & prepaid cards Deposit & loan services		Among others	Payment initiation requested by users	Provision of account information to users, among others
Financial requirements	Capital requirements				None
	Capital: ≤ €5M.; capital adequacy requirements (Basel III)	Capital: €350K or more; <2% of average outstanding electronic payments; among others	Capital: Between €2 and €125K (inclusive)	Capital: €50K or more	
Assets preservation	Deposit insurance	Isolation from other assets; preferential payment		None * NB: Prohibited from accepting deposits from users; required to maintain professional liability insurance	None * Required to maintain professional liability insurance

Source: Compiled by the JFTC from a Financial Services Agency material [88]

PSD2 stipulates that banks may not restrict or discriminate against payment service providers (PSPs)[89] that access account information at the request of

[88] https://www.fsa.go.jp/singi/singi_kinyu/financial_system/siryou/20161028/01.pdf

[89] *Payment service provider* is a credit institution having its head office or a branch within the EEA, an electronic money institution, a post office giro institution authorized to provide payment services under the national law of its home Member State, a payment service institution or similar.

users, including account information service providers (AISPs)[90] and payment initiation service providers (PISPs)[91]. Nor may they require PSPs to pay for such access. To become an AISP or PISP, a service provider must be authorized and supervised by the competent authorities of the home member state. A mechanism is in place to exclude problematic service providers from the market: Banks are required to verify that PSPs requesting connections are authorized entities and to refuse connections from unauthorized entities.

PSD2 requires that communications between PSPs be implemented using secure and common open standards. The requirement by the European Banking Authority, which is responsible for developing such standards, to use strong customer authentication (SCA)[92] as a security requirement has made it difficult to access account information using traditional screen scraping methods. This, in turn, has made it mandatory for banks to implement an open API infrastructure.

The JFTC asked relevant authorities in the EU and experts about the EU's institutional arrangements for open banking. Excerpts from their responses are provided below:

[90] *Account information service provider* is a provider of an online service, at the user's request, provides consolidated information on one or more payment accounts held by a payment service user with one or more payment service providers (banks, electronic money institutions, payment service providers, etc.).

[91] *Payment initiation service provider* is a provider of a payment initiation service, at the user's request, in relation to one or more payment accounts held by a payment service user with one or more payment service providers (banks, electronic money institutions, payment service providers, etc.).

[92] *Strong customer authentication* refers to authentication based on the use of two or more elements categorized as knowledge (something only the user knows, such as passwords), possession (something only the user possesses, such as telephone numbers), and inherence (something the user has as an attribute, such as fingerprints) that are independent one of each another.

<Characteristics of institutional arrangements around open banking in the EU>

(Relevant authorities)

- The media coverage of various data breaches over the last few years, not necessarily related to financial institutions, have probably impacted consumers' inclination towards (non) sharing of data. Legislation ensures that Open Banking providers have to abide by certain security and transparency rules, but it's up to the providers have to ensure transparency to their customers and gain their trust.

- That new business models are being designed continuously, and that each business model might carry its own risks (and advantages). Enforcing PSD2 should not be a complete "tick the box"[93] exercise. It is also important to listen to all stakeholder views before making any enforcement decisions.

(Experts)

- What distinguishes the EU's institutional arrangements from Japan's is that for API connections with fintech companies, they are prohibited from requiring them to sign a contract for such connections. The main reason is that if such contracts were allowed, fintech companies would not establish API connections unless they were large enough to be able to enter into such a contract with individual banks, raising the possibility that the entry of startups could be impeded. This is also the case in the UK and Australia. In Japan, fintech companies have to sign a separate contract with each bank. Few fintech companies can afford contract with more than 100 banks in the country.

- In principle, APIs should be provided free of charge. However, banks are allowed to charge for value-added services, such as identification services that use customer information.

[93] The act of checking boxes for predefined requirements to indicate whether they are met.

- I have heard that fintech companies are finding it difficult to connect with financial institutions because, unlike in the UK, under PSD2 API specifications vary between financial institution. As a result, the number of fintech companies in the market is lower in the UK, and so is the number of transactions.

2. Overview of Institutional Arrangements in the UK

In the United Kingdom, the Competition and Markets Authority (CMA), the country's competition authority, published an investigative report on competition and innovation in the retail banking industry[94] in August 2016. According to the report, the UK's largest banks account for an estimated 99.9% of the country's retail banking market, measured by population, and this hinders competition. Under these circumstances, in February 2017, the CMA issued an order requiring the nine largest banks in the UK[95] (the CMA9) to adopt common standards for open APIs and open up personal and business checking account information held by the banks to third party providers (TPPs).[96] This idea was to create an enabling environment for start-ups to bring new innovative services to the UK market. The order also requires that the CMA9 fund and establish an Open Banking Implementation Entity (OBIE) tasked with developing technical standards for open API and data formats and formulating guidelines on how to implement the SCA.

To operate as an AISP or PISP, a company must be authorized by the Financial Conduct Authority (FCA)[97] under the Payment Service Regulations 2017, the transposed PSD2. Once authorized, it will come under the supervision of the FCA. As of November 2021, more than 330 companies

[94] Competition & Markets Authority, *Retail banking market investigation*, August 2016

[95] The nine banks are the RBS Group, the Lloyds Banking Group, Barclays, the HSBC Group, Santander UK, Nationwide Building Society, Danske Bank, the Bank of Ireland, and the Allied Irish Bank Group.

[96] The order under Enterprise Act 2002

[97] The Financial Conduct Authority is an independent body that regulates the UK's financial services industry (including banks, financial companies, and financial advisors). Its activities are funded by fees paid by members of the industry.

were subject to the regulations, accounted for more than 95% of all checking accounts in the UK market.[98]

The JFTC asked relevant authorities and industry associations in the UK about the UK's institutional arrangements around open banking. Excerpts from their responses are provided below:

<Characteristics of institutional arrangements around open banking in the UK>

(Relevant authorities)

- Generally speaking, banks cannot prohibit customers from using an AISP or PISP. They can, however, deny access from such providers, if there are objective grounds, when they do not have a valid certificate, or when they are suspected to be engaged in a fraudulent transaction.
- As the CMA did not have in-house expertise to develop the necessary standards the CMA Order required the CMA9 to set-up and fund the OBIE to oversee the development and rollout of Open Banking in the UK.
- The UK Standard differs from the EU in that the UK requires the nine biggest banking groups to use the standard APIs developed. The Standard requires banks to use a standardized format and procedure. As a result of that, many other ASPSs started using the same standards. This means that there is a widely spread use of the same standards. By contrast, in the EU, these is no single European Open Banking API standard and industry initiatives have developed competing ones or firms have developed their own.
- The OBIE engages closely with the participants in the ecosystem. During the implementation phase of Open Banking, the OBIE collected industry views through the Implementation Entity Steering Group (IESG) and more recently through the End-User Participation Forum (EUPF).

[98] Competition & Markets Authority, *Corporate report: Update on Open Banking*, November 2021)

(Industry associations)

- Many firms operate a hybrid approach with some elements provided by external system vendors and others developed in-house. As a general rule, larger ASPSPs tend to develop more of their API infrastructure in-house and rely less on third parties, in comparison to their smaller competitors who are more reliant upon external vendors. However, significant functionality of the UK's open banking ecosystem (specifically the security framework and the 'Open Banking Directory') require a systemically significant portion of the ecosystem to be outsourced to external system vendors and we understand that the majority of our members are dependent upon external system vendors to ensure the ongoing security of the UK's open banking ecosystem.

- The cost [of provide a minimum level of open banking services to registered TPPs as ASPSP] is a significant burden for smaller banks in comparison to the number of customers who they provide services for. Many of the UK's ASPSPs are keen to explore a sustainable economic model that goes some way to fairly distribute the costs of providing API connectivity to their customers data and the services that ASPSPs provide to them.

- It is understandable that small- and medium-sized banks are unhappy about being asked to share the costs associated with open APIs. However, while API implementation may seem like an expensive project in the short term, it is a critical project that will determine the future of banks in the longer term. We may have no choice but to continue emphasize these benefits.

3. Overview of Institutional Arrangements in Australia

The Australian Competition and Consumer Commission (ACCC) is the competition authority in Australia. In July 2020, the ACCC introduced the Consumer Data Right (CDR)[99] under the Competition and Consumer Act,

[99] Australian Competition and Consumer Commission, "Competition and Consumer (Consumer Data Right) Rules 2020," February 2020

which it is responsible for enforcing. The aim is to allow empower consumers to access and control their own data, thereby increasing their ability to compare and switch products and services.

Data holders holding consumer data must have an online service to make the data available free of charge and in a manner that compiles with API standards when requested to do so by consumers or accredited data recipients[100] instructed to do so by consumers under the CDR. If approved as accredited data recipient, fintech companies will be allowed to provide services that take use of account information held by banks.

While the data must be sent and received via an API, the use of screen scraping is permitted to the extent necessary. The CDR's support desk states that data sharing using this particular method is not prohibited.[101]

As the CDR was designed with reference to the EU's PSD2, it was first applied to the banking sector.[102] However, it is comprehensive in scope and its application is not limited to specific sectors. In the future, the CDR may be applied to other sectors such as energy and telecommunications.

The JFTC asked experts about the Australia's institutional arrangements around open banking. Excerpts from their responses are provided below:

[100] Accredited data recipients are companies that handle data under the CDR. To be accredited, they must meet strict standards set by the ACCC.

[101] https://cdr-support.zendesk.com/hc/en-us/articles/900005316646-Guidance-on-screen-scraping

[102] In July 2020, it was first applied to the four largest banks defined as initial data holders. They were Australia and New Zealand Bank, Australia Commonwealth Bank, National Australia Bank, and Westpac Bank. It was further applied to other businesses as subsequent data holders in February 2020. In applying the CDR to different areas in stages, the ACCC set three phases: Phase 1 (e.g., savings accounts, account charging by credit cards), Phase 2 (mortgage loans), and Phase 3 (e.g., investment accounts, personal loans, retirement accounts).

<Characteristics of institutional arrangements around open banking in Australia>

(Experts)

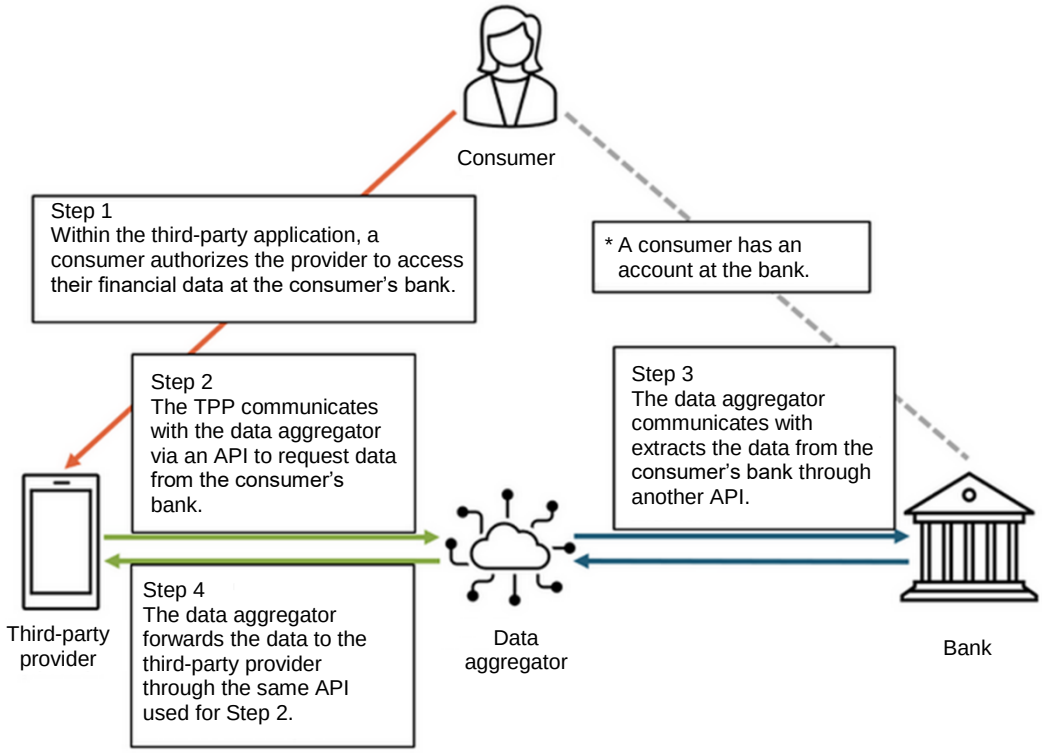
- Until API capabilities are well developed, the capabilities provided by screen scraping cannot be fulfilled. To fill the gap, the CDR allows for the use of screen scraping unless it raises security concerns. I understand that Europe's PSD2 is similarly designed.

- Japan has banned screen scraping that is not based on a contract. So EPSPs in the country have lost the bargaining chip, meaning they can no longer argue that API connections are too expensive so they have no choice but to use screen scraping. As far as I know, fintech companies in Europe have long argued that screen scraping should be allowed to weaken the bargaining power of banks, among other things.

4. Status of Transactions in the US

The US does not have a regulatory framework that directly regulates access to bank accounts through a TPP. The de facto framework has been shaped by individual transactions between businesses. The most common arrangement is fintech companies called "data aggregators" to act as an intermediaries for connections between banks and TPPs. Data aggregators contract with banks and TPPs to provide an environment where both sides are seamlessly connected via an API. As a result, a TPP can acquire customer account information from multiple banks by connecting to a data aggregator, significantly reducing the burden of signing contracts and connecting to systems.

Figure 37: API connection via a data aggregator



Source: Federal Reserve Bank of Kansas City[103]

The JFTC asked industry associations in the US to describe the business of the country's data aggregators. Excerpts from their responses are provided below:

<Business characteristics of data aggregators>

(Industry associations)

- Data aggregators collect connection fees from TPPs, the users of their services. They also sell sets of data collected from various sources that are combined to meet the needs of users in a practice known as value added selling. Data aggregators should be recognized as a data access platform rather than a simple conduit.

[103] Federal Reserve Bank of Kansas City, "Data Aggregators: The Connective Tissue for Open Banking," August 2022

- Data aggregators would lose trust of banks if they were connected TPPs with security vulnerabilities. Therefore, they conduct due diligence on aspects such as whether the TPPs they connect to are not on the list of sanctioned countries, whether such TPPs meet minimum security requirements, and the nature of data they wish to receive.

- A data aggregator has been using screen scraping to obtain customer information. Now it is moving to API layers. Unable to block access to customer information through screen scraping, a number of banks have filed lawsuits challenging the illegality of the practice, but failed to win a court decision that it is illegal. This data aggregator, for its part, is well aware that screen scraping is problematic in terms of data protection. In the end, It won a contract for API connections with some banks by arguing that it would stop screen scraping if they allowed data acquisition via an API connection, and that having an API would be beneficial because screen scraping also poses reputation risks for them in terms of data protection. In such circumstances, fintech companies may not need laws or regulations that make API connections mandatory.

Although there is no industry-wide API standard in the US, the Financial Data Exchange (FDX), a industry association of banks and fintech companies, is developing technical standards for access to industry associations. Many fintech companies that provide data aggregation services are members of FDX; they use APIs that conform to FDX API, an API standard developed by FDX.

There has been a significant development in regulatory development by the agencies. In October 2017, the Consumer Financial Protection Bureau (CFPB)[104] announced the “Consumer Protection Principles: Consumer-

[104] The Consumer Financial Protection Bureau is an independent administrative agency within the Federal Reserve System. The CFPB was established under the Dodd-Frank Act, which was enacted in July 2010, to foster fairness and transparency in consumer financial services, such as mortgage and credit cards. Its activities include enforcing consumer financial law, examining business practices, and conducting market surveillance.

Authorized Financial Data Sharing and Aggregation" [105],[106] to enforce Section 1033 of the Dodd-Frank Act, which establishes the right of consumers to access their own financial data. However, the principles are not legally binding. An executive order issued by President Joe Biden in July 2021 directs the CFPB to continue to developing regulations under Section 1033 of the Dodd-Frank Act.[107]

In his October 2022 speech, the CFPB director stated that his bureau will consider implementing regulations requiring financial institutions that offer deposit accounts, credit cards, digital wallets, prepaid cards, and other services to implement API connection infrastructure to share data[108]. Going forward, we may see more progress in the industry-led initiative to promote open banking in the US market.

The JFTC asked experts and industry associations in the US about characteristics of transactions around open banking in the US. Excerpts from their responses are provided below:

[105] Consumer Financial Protection Bureau, "Consumer Protection Principle: Consumer-Authorized Financial Data Sharing and Aggregation," October 2017

[106] Among the principles are that consumers can authorize secure access to their data by third parties, that such authorized third parties can access only necessary data, and that consumers can transfer their data to other financial institutions.

[107] The White House, "Executive Order on Promoting Competition in the American Economy" Sec. 5. (t)(i) in July 2021

[108] Consumer Financial Protection Bureau, "Director Chopra's Prepared Remarks at Money 20/20," October 2022

<Characteristics of transactions around open banking in the US>

(Experts)

- In the US, fintech companies are partnering with banks even though they are not required to do so by law. Often, banks do not charge connection fees because working with fintech companies allows them to increase their deposits, which in turn funds their new businesses.

(Industry associations)

- In the US, unlike in Japan, there is a segment of the population that does not have access to financial services provided by banks. Financial inclusion is a concept to help these people. This is one of the reasons why open banking is being promoted; it is not just about stimulating competition in the financial services market.

- Government regulations and policies are compared to traffic rules (especially speed limits). By adhering to such “speed limits,” industry associations have driven the standardization of payloads, connectivity, certification, and user experience (UX). The mutual inviolability of the roles of government and industry has allowed the open banking initiatives to proceed extremely smoothly.

- TPPs must sign a contract with each bank. However, due to the lack of a standard contract form, they have to spend a lot of time negotiating such a contract. This is a barrier to entry for small TPPs who are not used to dealing with large banks.

- Many small TPPs outsource the development of part or all of a system for a particular operation. They fall behind in developing such systems because it is difficult to do so before the regulations are clearly defined.

5. Insights from Institutional Arrangements and Transaction Practices Abroad

The EU, UK, and Australia have legislated the right of consumers to access their data, with the understanding that they own the data. This has led to the creation of a data-sharing environment, including the development of API connectivity infrastructure at banks. As a result, many fintech companies now have access to data held by banks, which in turn has helped to stimulate innovation in the financial market.

In some countries, industry associations made up of both banks and fintech companies are discussing various issues in the fintech sector, including open banking. These associations include UK Finance in the UK and FDX in the US. They provide opportunities for smooth communication between banks and fintech companies. The resulting closer cooperation between them is believed to contribute to the creation of innovation.

The JFTC hopes that this report will lead to new initiatives that will further improve the competitive environment in Japan’s cashless sector, hopefully encouraging innovation and enhancing user convenience. If such initiatives leave major competition policy issues unsolved, relevant ministries and agencies may also consider launching initiatives based on the overseas institutional arrangements described in this report.

Chapter 6: Future Initiatives

This latest survey is a follow-up on the Report on Household Accounting Services and the Code Payments Report. The aim is to find out how transactional practices have changed and how various initiatives have progressed in light of the five recommendations made in these previous reports.

In Japan, the number of users of household and other accounting services, as well as the amount of code payment, is growing and is expected to continue to grow. The importance of ensuring fair and free competition in the markets for household and other accounting services and cashless payments, such as code payments, will also increase.

The JFTC hopes that, in light of this report, banks, EPSPs, non-bank code payment providers, and other stakeholders will continue to make pro-competitive efforts to better serve the interests of consumers.

For its part, the JFTC will continue to monitor transactions between banks and EPSPs and between banks and non-bank code payment providers. It will also conduct a further follow-up to make additional recommendations from a competition policy perspective. In addition, the JFTC will continue to strictly and appropriately deal with any possible violation of the Antimonopoly Act, although no such cases were found in the survey.

[End of Text]

Appendix: Glossary

A

- **Account**
  A bank account for using a particular website or service.

- **Account information service provider (AISP)**
  An AISP is a provider of an online service, at the user's request, provides consolidated information on one or more payment accounts held by a payment service user with one or more payment service providers (banks, electronic money institutions, payment service providers, etc.).

- **Accredited Data Recipient**
  Businesses that handle consumer information under the Australian Consumer Data Rights（CDR）.

- **Application Programming Interface (API)**
  A connection method for securely using the functionality and data of other systems. APIs at banks include "read-only APIs" that allow external services to connect to the bank's system and retrieve account information, such as balance inquiries, and "read-write APIs" that allow funds to be transferred at the request of the user.

- **API Gateway**
  A new common infrastructure for connecting to the Zengin system based on API connections. Using the API Gateway, participants in the Zengin system will be able to connect to the Zengin system using standard connection protocols and simple methods, without the need for traditional relay computers.

- **AML/CFT Measures**
  Anti-Money Laundering/Countering the Financing of Terrorism. A set of measures against transactions by antisocial forces, terrorist organizations, criminal groups, and illegal account transactions such as bank transfer fraud and loan fraud.

C

- **Cashless Payment**
  Payment with a means of payment other than physical cash (bills and coins).

- **CARDNET**
  The credit payment network operated by Japan Card Network is a credit payment network that connects credit card companies with member merchants. It is also used for account charging or linking in code payments as a means of transmitting account transfer information to banks.

- **Carrier Payment**
  A payment service that allows users to pay for products and other items by combining them with their mobile phone bill.

- **Consumer Data Right (CDR)**
  The right of consumers to access and control their own information as provided for in the Australian Competition and Consumer Commission's (ACCC) Competition and Consumer Act.

- **Credit And Finance Information Switching System (CAFIS)**
  Originally developed by the former Nippon Telegraph and Telephone Public Corporation, CAFIS is now a credit card authorization service offered by NTT Data. It is also used for account charging or linking in code payments as a means of connecting to a bank's core system.

D

- **Data Aggregators**
  A company that contracts with multiple banks and fintech companies to provide an environment that seamlessly connects the two through APIs or screen scraping.

- **Domestic Funds Transfer System**
  A system for transferring funds and settling foreign exchange notices related to transfers between domestic financial institutions.

- **Domestic Funds Transfer System Operational Costs**
  It is a fee paid by the sending bank to the receiving bank for interbank

settlement through the Zengin system and was introduced on October 1, 2021 with the abolition of the interbank commission. The fee is calculated from the cost of processing foreign exchange transactions and the amount of profit necessary for the sending bank to continue its foreign exchange business, and is set at 62 yen (excluding tax) per foreign exchange transaction.

F

- **Financial Inclusion**
  Initiatives to ensure that no one is left behind to accessing and benefiting from financial services.

- **Fintech**
  A portmanteau of finance and technology, refers to new financial services created by combining information technology with financial services.

- **Fund Transfer**
  A method of settling money without the direct movement of cash, using bills of exchange, checks, postal money orders, bank transfers, etc.

G

- **Gateway**
  One system required to connect multiple systems.

I

- **Interbank Fees**
  A fee paid by the sending bank to the receiving bank for interbank settlement through the Zengin system. The fee was previously set at 117 yen (excluding tax) for transfers of less than 30,000 yen and 162 yen (excluding tax) for transfers of 30,000 yen or more, but was abolished on October 1, 2021, and a new "domestic exchange system operation fee" was established.

- **Internet Banking（IB）**
  A service that allows bank users to access the financial institution’s system via the Internet using a PC, smartphone or other terminal to check account

balances, transfer funds, etc. by signing up for the service. The service is offered separately for personal and corporate accounts.

J

- **Japanese Banks' Payment Clearing Network**
  Commonly known as the Zengin System. The Zengin System is an online system that centrally handles the sending and receiving of notifications of domestic funds transfer transactions between banks that are members of the Domestic Funds Transfer System, as well as the calculation and settlement of interbank funds transfer amounts resulting from such transactions.

O

- **Open API**
  Opening an API to allow access by other companies.

P

- **Payload**
  In information communication, the main body of data excluding headers, metadata, and other additional information contained in transmitted data.

- **Payment**
  The act of settling a monetary asset/liability relationship between two parties through the delivery or exchange of funds or other monetary assets.

- **Payment initiation service provider (PISP)**
  PISP is a provider of a payment initiation service, at the user's request, in relation to one or more payment accounts held by a payment service user with one or more payment service providers (banks, electronic money institutions, payment service providers, etc.).

- **Payment Service Directive 2 (PSD2)**
  A Directive of the European Parliament came into force regulate payment services and PSPs within the European Economic Area (EEA).

- **Payment service provider (PSP)**
  PSP is a credit institution having its head office or a branch within the EEA,

an electronic money institution, a post office giro institution authorized to provide payment services under the national law of its home Member State, a payment service institution or similar.

R

- **Retail Payment Infrastructure**
  A service that allows users to connect to their bank account from a code payment app when making balance charges and linking from their code payment account balance.

S

- **Screen Scraping**
  In this report, it refers to a method by which a fintech company obtains passwords and other information related to IB services from a user, accesses the system on the user's behalf, and acquire the information.

- **Strong customer authentication (SCA)**
  Authentication based on the use of two or more elements categorized as knowledge (something only the user knows, such as passwords), possession (something only the user possesses, such as phone numbers), and inherence (something the user has as an attribute, such as fingerprints) that are independent one of each other.

T

- **Third Party Provider (TPP)**
  In this report, it refers to an entity that receives instructions from a customer and acquires customer's account information held by a bank.

U

- **User Experience (UX)**
  The experience, such as ease of use and usability, that a user, or consumer, has with a product or service. The point of contact between the user and the product or service is called the user interface (UI).

-