

Survey on Cashless Payments with QR Code and barcode

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The Japan Fair Trade Commission

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Chapter 1: Purpose of the survey

1. Purpose of the survey

With business operators utilizing fintech¹ (hereinafter referred to as “fintech companies”) entering the financial field in recent years, there are some cases that they provide financial services including payment² services. It is expected that new entrants utilizing new technologies will help stimulate competition among businesses, expand the extent of user choice, improve convenience, and reduce usage costs.

Interest on the part of policymakers operating in the field of payments is rising both in Japan and abroad. In Japan, cashless points reward programs are being operated for the purpose of promoting cashless payments³. In other countries including the United Kingdom, Canada and Australia, local competition authorities have conducted surveys relating to the field of payments and proposals concerning competition policy have been issued.

In light of these conditions as they exist both in Japan and abroad, the Japan Fair Trade Commission decided to conduct a survey in the field of cashless payments in order to ascertain issues concerning competition policy in this field.

In particular, rapidly spreading⁴ in the field of cashless payments at the moment is an option known as code payments, a payment mode by which someone uses a smartphone-based payment app to read a QR code or barcode and make a payment. We see not just banks but also business operators other than deposit-handling financial institutions (hereinafter referred to as “nonbanks”) entering the area of code payments, which encompasses new payment services. A variety of entities are thus providing services in this area. On this note, actual conditions concerning code payment transactions were ascertained in Chapter 2 of this Report.

In Chapter 3, we investigated the state of (i) transactions pertaining to *account charging*⁵ and *links*⁶ undertaken or established as part of the flow for deposit procedures by which funds are transferred from a user’s bank account to the user’s code payment account and (ii) deposit transfer⁷ used in the flow for disbursement procedures by which sales proceeds earned by a member merchant from a payment executed through the use of a code payment

¹ A portmanteau combining *finance* and *technology*, *fintech* refers to new financial services created by linking information technology with financial services.

² Refers to the extinguishment of a relationship based on a monetary claim or debt between parties when one party transfers funds or another example of monetary value to the other.

³ Refers to the act of making payments by a payment means not involving the use of physical cash (banknotes and coins).

⁴ According to the Consumer Affairs Agency’s *Results of an Opinion Survey Concerning Cashless Payments*, consumers who choose to use barcode or QR code payments as modes of payment that are used on a relatively frequent basis approximately doubled in number from July 2019 (17.7 percent) to December 2019 (34.4 percent).

⁵ Mentioned below

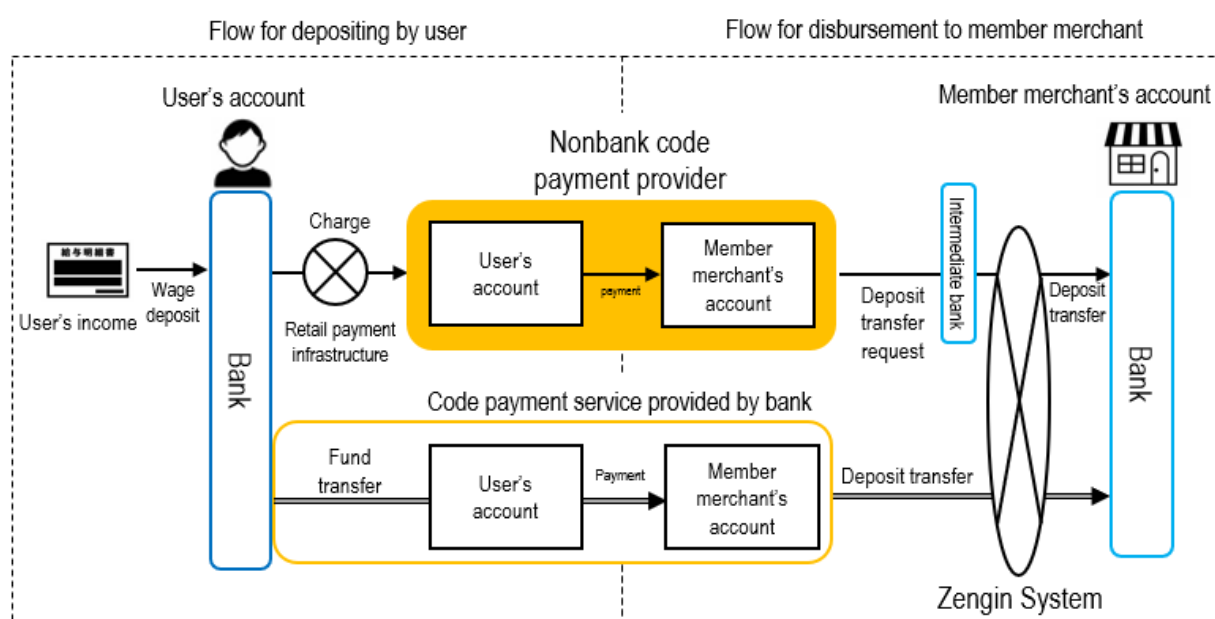
⁶ Mentioned below

⁷ Refers to the transferring of the payer’s cash or funds in the payer’s deposit account as opened with a deposit-handling financial institution to another deposit account in accordance with instructions issued by the payer.

service are paid out from the member merchant’s code payment account to the member merchant’s bank account. In Chapter 4, we summarized the issues as they pertain to competition policy and the Antimonopoly Act (hereinafter referred to as “the AMA”).

Based on our awareness of the issues as noted above, an overview of the flow of transactions for code payments addressed by this survey is as presented in Fig. 1-1.

Fig. 1-1. Flow of transactions for code payments addressed by this survey



2. Methods of this survey

This survey was conducted from October 2019 to March 2020 in the following manner.

(1) Questionnaire

A. Administered to business operators (November 12, 2019, to January 24, 2020)

- 137 banks (of which 129 provided responses)
- 67 fund transfer service providers⁸ (of which 48 provided responses)
- 2 retail payment infrastructure providers⁹ (of which 2 provided responses)

B. Administered to consumers (December 20 to 25, 2019)

A screening survey was administered to 12,450 persons. An online questionnaire

⁸ Refers to nonbank business operators that are registered with the Prime Minister under the Payment Services Act and that engage in exchange transactions equivalent to no more than one million yen.

⁹ Refers to business operators who provide a service by which a connection is established between a code payment app and a bank account whenever a user undertakes account charging from his or her own bank account against the balance of his or her own code payment account.

was then administered to 4,000 consumers who indicated in the screening survey that they use code payment services (Fig. 1-2) (commissioned survey).

Fig. 1-2. Online questionnaire (4,000 persons)

	10-19 years old	20-29 years old	30-39 years old	40-49 years old	50-59 years old	60-69 years old	70-79 years old	80 years old or older	Total
Male	57	210	297	458	395	466	359	73	2,315
Female	65	326	338	336	289	194	110	27	1,685
Total	122	536	635	794	684	660	469	100	4,000

(2) Interviews

Interviews were administered to the following 55 respondents.

- Banks (21 banks consisting of 4 city banks, 11 regional banks, and 6 other banks)
- Fintech companies (15 companies consisting of 11 fund transfer service providers and 4 fintech companies other than fund transfer service providers)
- Industry associations (banking) (4 associations)
- Industry associations (fintech) (2 associations)
- Retail payment infrastructure providers (2 providers)
- Experts (11 experts)

Chapter 2: Code payments and basic structure of its transactions

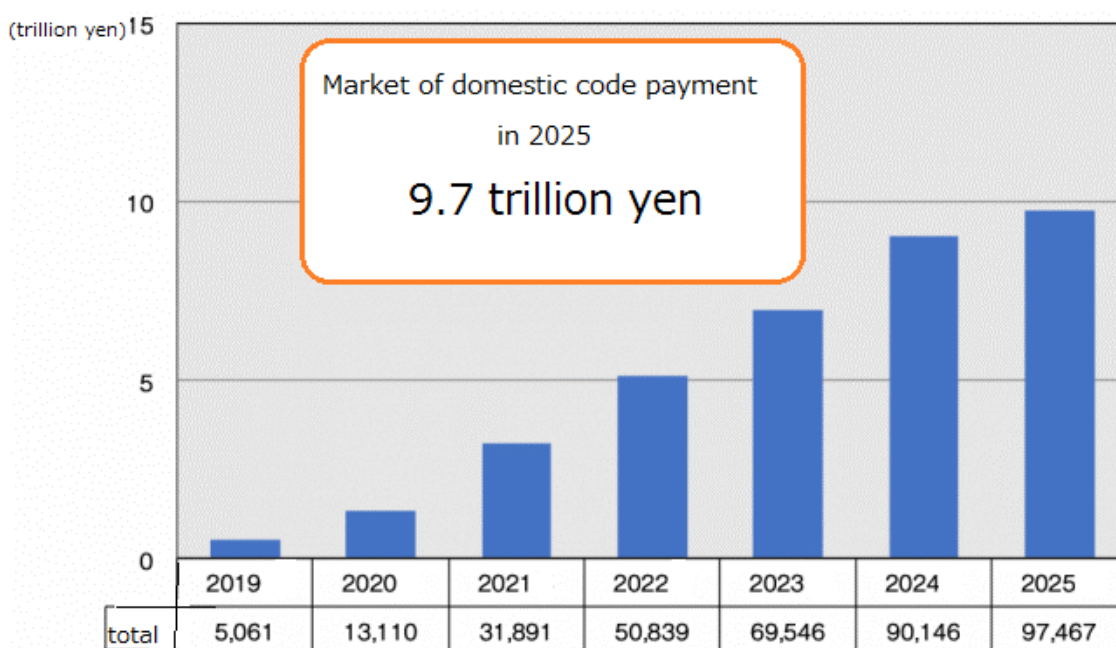
1. Outline of code payment transactions

(1) Scale of transactions and usage

A. Scale of transactions

The size of the market for domestic code payments is projected to grow from 0.5 trillion yen in 2019 to 9.7 trillion yen in 2025. This figure is expected to continue increasing in the years to come (Fig. 2-1).

Fig. 2-1. Expected changes in the volume of domestic code payment transactions



(hundred million yen)

Source: *Electronic Payment Overview 2019-2020*, CardWave

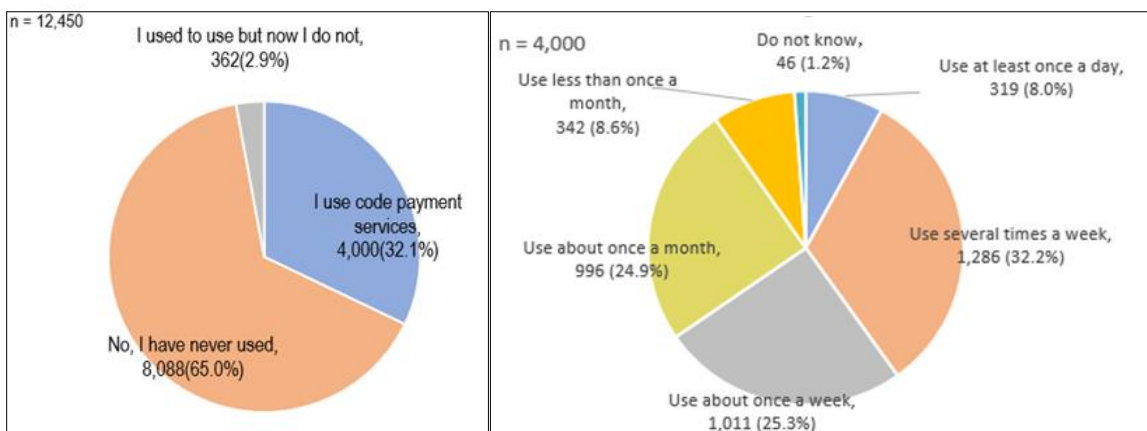
B. Code payment usage

In a questionnaire we administered to consumers (likewise, any reference to a questionnaire or interviews made below shall be to a questionnaire or survey administered by the Japan Fair Trade Commission), more than thirty percent of respondents indicated that they use code payment services (Fig. 2-2).

Moreover, more than 65 percent of code payment users indicated that they use a code payment service (the most frequently used code payment service if multiple types of code payment services are used) about once a week or more frequently (Fig. 2-3).

Fig. 2-2. Code payment usage (left)

Fig. 2-3. Frequency of code payment usage (right)





Source: Results of a questionnaire administered to consumers

(2) Payment method and payment means applied in code payment services

A business operator providing code payment services (hereinafter referred to as “code payment provider”) provides code payment services to users through a payment app provided by the code payment provider. A user will open his or her own account through such a payment app on his or her own smartphone to use a code payment service.

When it comes to code payments, instructions for transferring monetary value for payment are issued through the use of a QR code or barcode (hereinafter referred to as “code”). There are two types of payment methods: Consumer-presented mode (CPM) and Merchant-presented mode (MPM) (Fig. 2-4).

Fig. 2-4. Consumer-presented mode and Merchant-presented mode

<p>Consumer-presented mode (CPM)</p>		<p>Method by which the user displays a code on a payment app on his or her own smartphone, which is then scanned and read by a member merchant associated with a code payment provider using a code reader or other such device.</p>
<p>Merchant-presented mode (MPM)</p>		<p>Method by which a code presented by a member merchant is read by a user using his or her own smartphone.</p> <p>In some cases, the code a merchant member presents consists of a code that includes information on the payment amount (dynamic code). In other cases, the user</p>

		enters the amount to pay once the code presented by a member merchant is read in order to carry out the payment procedure (passive code).
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As for the monetary value that is exchanged when a code payment is made, the balance of the account managed by the code payment provider on the payment app (hereinafter referred to as “account balance”) is primarily used. When a user (consumer) purchases a product, the payment process is typically undertaken 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 will need to be increased before the code payment service is used by the user (hereinafter referred to as “charge”)¹⁰.

In addition, there are methods of payment by which no account balance is used. For example, a payment can be made by directly withdrawing the amount from the user’s bank account by having the user use a code to issue an instruction to have the payment processed or by using a credit card to process a payment (hereinafter referred to as *linking* with a bank account or credit card). (Hereinafter, the account balance, bank account deposit balance, or credit card credit limit that is used as monetary value at the time a user processes a code payment is referred to as “payment means”.)

(3) Primary providers

Code payment providers include banks¹¹ that provide code payment services and nonbank business operators (hereinafter referred to as “nonbank code payment providers”). An outline of each of these types of providers is set forth below.

A. Banks

The Banking Act identifies the acceptance of deposits, lending of funds, and exchange transactions as operations specific to banks. Therefore, methods of payment through code payment services provided by banks consist of the following: linking with a deposit account held with a bank by the user and making a payment by using an

¹⁰ Some code payment providers provide a deferred payment service whereby the amount used for a code payment is withdrawn from a bank account or invoiced subsequent to the purchase of a product or provision of a service. However, this approach is not addressed in this Report.

¹¹ While credit associations, credit unions, the Agricultural and Forestry Central Bank, the Central Cooperative Bank for Commerce and Industry, agricultural cooperatives, fishery cooperatives, and other such entities engaged in operations specific to banks under laws and ordinances other than the Banking Act are, strictly speaking, not banks, they shall be collectively referred to here as “banks”.

account balance for code payments as charged by the user from a deposit account on a payment app¹². In a questionnaire administered to banks, approximately half of all surveyed banks (63) indicated that they provide code payment services.

Code payment services provided by these banks consist of the following:

- (i) Code payment services are provided by the bank to users who have opened up an account with them.
- (ii) Code payment services are provided by the bank to users who have opened up an account with them but users can use code payment services at affiliated member merchants thanks to the provision of code payment services by the bank and other banks with which the bank has established partnerships.
- (iii) Code payment services are provided by a specific bank but account charging from an account with a bank other than the providing bank can be undertaken.

B. Nonbank code payment providers

A nonbank code payment provider has obtained the legal qualifications required for the code payment business model in question (Fig. 2-5).

Fig. 2-5. Examples of legal qualifications obtained by nonbank code payment providers

	Fund transfer service provider	Third-party prepaid payment issuer	Specific payment service provider
Governing law	Article 37 of the Payment Services Act	Article 7 of the Payment Services Act	Article 35-17-2 of the Instalment Sales Act
Entry requirement	Registration	Registration	Registration
Upper remittance limit	1 million yen	None	Remittances not undertaken
How accepted funds are preserved	Deposit mandated (full amount)	Deposit mandated (half amount)	Funds not accepted
Whether deposit or cash refund is possible	Possible	Not possible	Funds not accepted
Asset requirements	None	Minimum net assets of 100 million yen or more	None

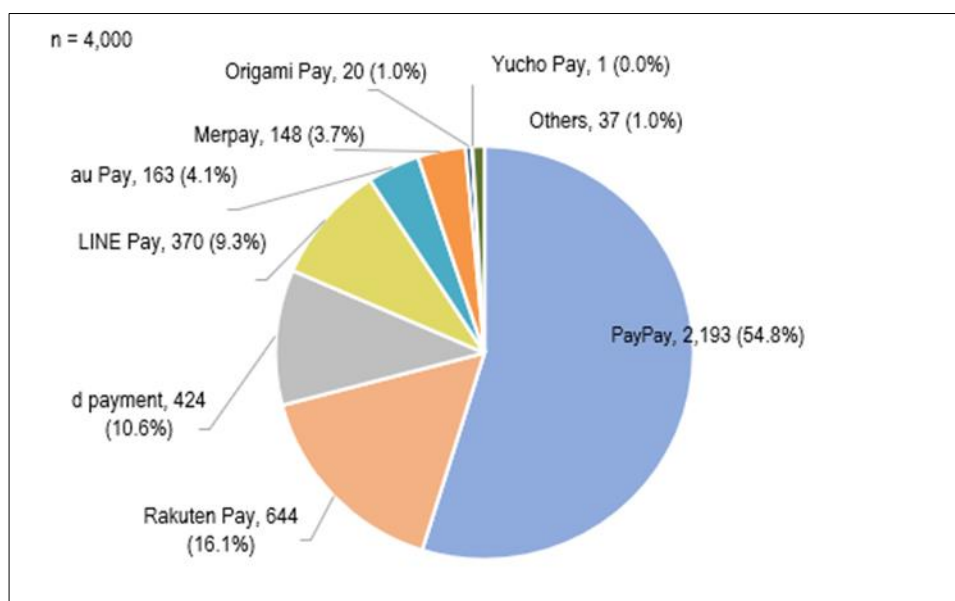
¹² Where a bank issues an account balance that cannot be repaid to a bank account, it will need to be registered as a third-party prepaid payment issuer under the Payment Services Act.

Examples where needed	When providing code payment services using account balances for which deposit or cash refunds are possible.	When providing code payment services using account balances for which deposit or cash refunds are not possible.	Where the provider is a business operator affiliated with a credit card and a comprehensive commission merchant agreement is concluded with the credit card company.
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Many nonbank code payment providers provide services for refunding from an account balance to a deposit account or cash. Since these services fall under exchange transactions, there are many cases in which a nonbank code payment provider or a subsidiary thereof is registered as a fund transfer service provider. In a questionnaire administered to fund transfer service providers, there were eight business operators that indicated that they have registered as fund transfer service providers and are providing code payment services accordingly.

In addition, a questionnaire administered to consumers revealed that 99 percent of code payment users use code payment services provided by business operators who have registered as fund transfer service providers most frequently (Fig. 2-6). In this survey, the eight given business operators are regarded as “major nonbank code payment providers”.

Fig. 2-6. Code payment services most frequently used by users

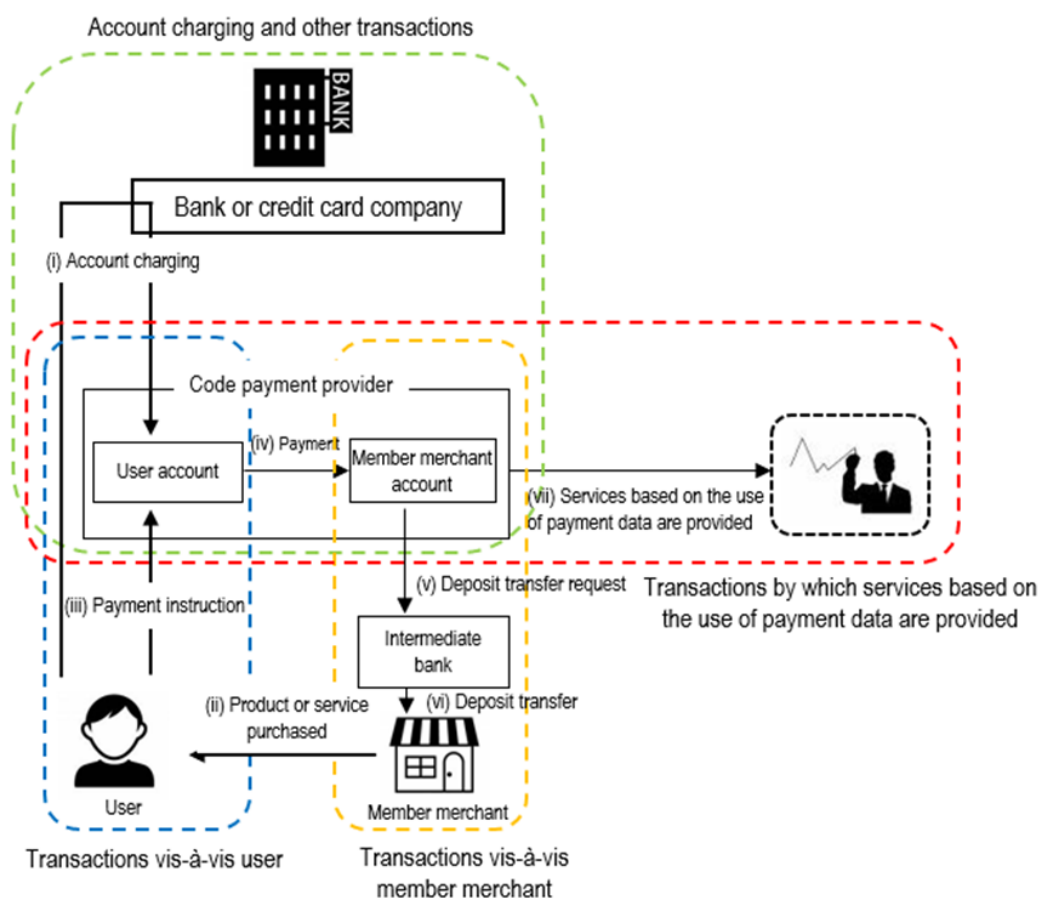


Source: Results of a questionnaire administered to consumers

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

Many code payment services that are currently being provided involve payments that are carried out using an account balance. The flow of code payment transactions based on the use of an account balance is as outlined in Fig. 2-7.

Fig. 2-7. Flow of code payment transactions



(i)	The user increases his or her own account balance on the code payment provider's payment app from 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: Produced by the Japan Fair Trade Commission based on interviews held with fund transfer service providers and banks

Based on the flow of transactions described above, this survey focused on the following four business relationships involving code payment providers and ascertained the actual conditions of these transactions.

A. Account charging and other transactions

A business relationship between a bank or credit card company and a nonbank code payment provider, as required to enable the nonbank code payment provider to undertake account charging or establish a link with the banks.

B. Transactions vis-à-vis users

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

C. Transactions vis-à-vis member merchants

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

D. Transactions which provide services based on the payment data

A business relationship in which data amassed by a code payment provider through transactions vis-à-vis users and transactions vis-à-vis member merchants are used to provide marketing services and other services based on the use of payment data to users, member merchants, and third parties.

2. Actual transactions for each type of business relationships

(1) Account charging and other transactions

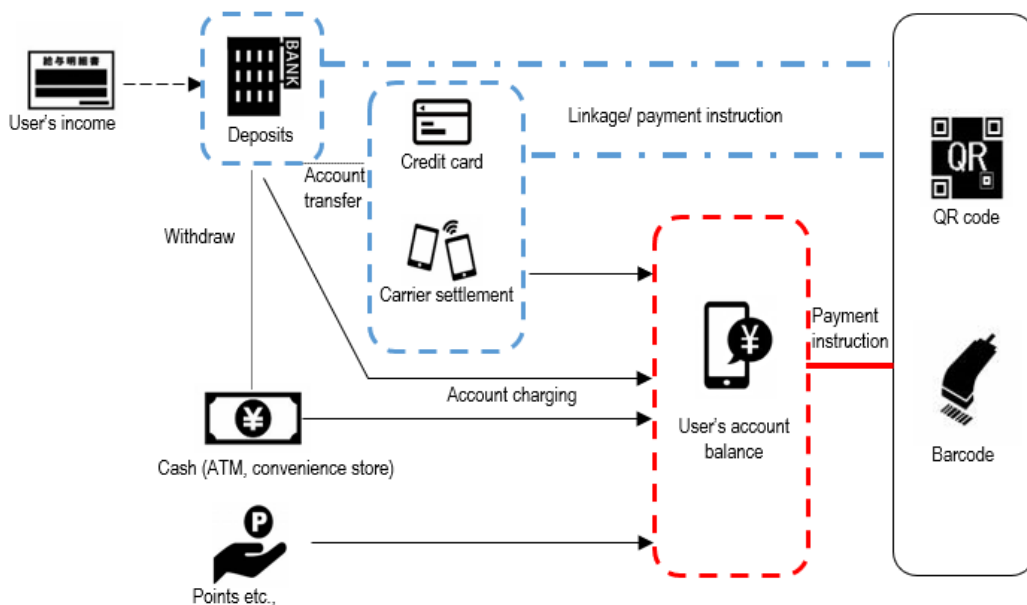
A) Outline of account charging

As stated in 1(3) A above, a bank, because it provides deposit services to users, undertakes account charging from or establishes a link with a user’s bank account that has been opened with the bank whenever the bank provides code payment services (hereinafter collectively referred to as “account charging and other transactions”) and can utilize these actions as payment means for code payment services.

At the same time, a nonbank code payment provider secures a payment means for code payment services by providing a method of undertaking account charging and other transactions based on the use of, among other possibilities, a bank account, credit card, carrier payment¹³, cash, or points to a user and having the user undertake account charging and other transactions.

The payment means as used by code payment providers and methods by which account charging and other transactions are undertaken based on the above are as outlined in Fig. 2-8.

Fig. 2-8. Payment means used with code payment services and the methods by which account charging and other transactions are undertaken



Note: As stated in 1(2) above, the user’s account balance (as marked by a dotted red line) is typically used as a payment means; where a link with a bank account or credit card is established, however, the user’s deposit account or credit card credit limit

¹³ Refers to a payment service that allows a user to pay the cost of a product or service by tacking it onto his or her mobile phone bill.

(as marked by a dotted blue line) is used as a payment means instead.

Since the user's wages or other sources of income are basically transferred to his or her bank account¹⁴, the use by the user of a code payment service entails a withdrawal of the used amount from the user's bank account or withdrawal of a deposited amount even in the event that account charging and other transactions are undertaken from a credit card, a carrier payment service, or cash. For this reason, a nonbank code payment provider needs to have funds transferred from the user's bank account in order to secure a payment means for a code payment service.

Among the methods by which account charging and other transactions are undertaken as shown in Fig. 2-8, the method most used by consumers, as revealed by a questionnaire administered to consumers, is the undertaking of account charging from a bank account (Fig. 2-9).

Fig. 2-9. Methods by which account charging and other transactions are undertaken for code payment services that are most frequently used by users (multiple responses)

Contents of response	Users
Charge from a bank account	1,381 (34.5 %)
Charge from a credit card	1,350 (33.8 %)
Link with a credit card	821 (20.5 %)
Cash charge at a convenience store or ATM	595 (14.9 %)
Charge based on the use of sales or points associated with other services operated by a code payment provider (such as an auction)	472 (11.8 %)
Account charging and other transactions through a carrier payment service	312 (7.8 %)
Link with a bank account	269 (6.7 %)
Other	14 (0.4 %)
Number of responses	4,000

Source: Results of a questionnaire administered to consumers

According to responses obtained from seven major nonbank code payment

¹⁴ Under labor laws, the transferring of wages to be paid by an employer to a worker's bank account is accepted as an exception to the payment of wages in the form of cash (Article 24 of the Labor Standards Act and Article 7-2 of the Ordinance for the Enforcement of the Labor Standards Act).

providers¹⁵ in a questionnaire administered to fund transfer service providers, there were four providers for whom the amount of account charging and other transactions undertaken from bank accounts accounted for more than 30 percent of the total amount of account charging and other transactions undertaken by users of code payment services provided by each of these providers; for two of these four providers, the amount of account charging and other transactions undertaken from bank accounts accounted for more than 70 percent (Fig. 2-10).

For two providers, the amount of account charging and other transactions undertaken from credit cards accounted for more than 30 percent. The amount of account charging and other transactions undertaken with cash did not account for more than 30 percent for even a single provider.

The median value of the amount of account charging and other transactions per time by users was 4,697 yen for account charging and other transactions undertaken from bank accounts, 4,260 yen for account charging and other transactions undertaken from credit cards, and 8,099 yen for account charging and other transactions undertaken with cash.

Fig. 2-10. Percentages of the total amount of account charging and other transactions accounted for by different methods by which account charging and other transactions are undertaken for major nonbank code payment providers

Method by which account charging and other transactions are undertaken	Among seven major nonbank code payment providers, number of providers for whom the percentage of the total amount of account charging and other transactions undertaken...		Amount of account charging and other transactions per time (median value)
	Exceeded 30%	Exceeded 70%	
Bank accounts	4	2	4,697 yen
Credit cards	2	0	4,260 yen
Cash	0	0	8,099 yen

Source: Results of a questionnaire administered to fund transfer service providers

B. Flow of account charging and other transactions

Where a nonbank code payment provider provides users with a method of undertaking account charging and other transactions with a credit card, carrier payment

¹⁵ Of eight providers questioned, one did not provide responses pertaining to percentage breakdowns for amounts of account charging and other transactions undertaken.

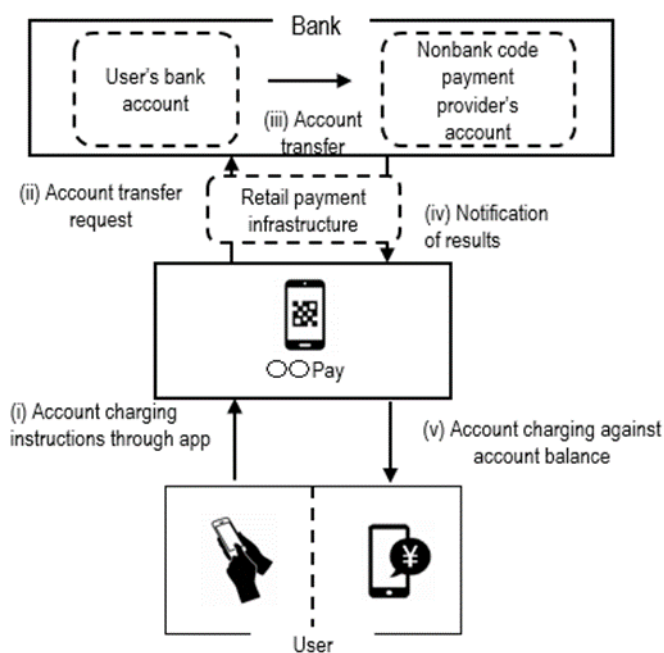
service, or cash from a convenience store or ATM, an agreement to enable the undertaking of account charging and other transactions by the user is concluded with whatever credit card company, mobile phone company, convenience store, or ATM operating company applies in each given case.

Where a nonbank code payment provider provides users with a method of undertaking account charging from a bank account, the nonbank code payment provider needs to conclude an agreement with a bank in advance to enable users to undertake account charging from a bank account and an account of the nonbank code payment provider needs to be opened at the given bank.

To undertake account charging from a bank account, a user shall conclude an agreement to allow account transfers¹⁶ from his or her own bank account to the bank account of the nonbank code payment provider through a payment app with both the bank and the nonbank code payment provider.

The flow of steps for undertaking account charging from a bank account based on the above is shown in Fig. 2-11.

Fig. 2-11. Flow of steps for account charging from a bank account



¹⁶ Refers to the transferring of funds in a deposit account of a client, as the account transfer consignor, to another deposit account as instructed by a third party other than the payer.

(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 ¹⁷ 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.

To enable the user to undertake account charging from his or her bank account, the nonbank code payment provider will need to transmit instructions pertaining to account charging as received from the user through its own payment app to the bank's core system. At the same time, the bank's core system is subject to restrictions on methods of connection from outside sources due to security concerns, which means that a nonbank code payment provider will either use a service provided by a retail payment infrastructure operator or transmit information using a Read/Write API developed by the bank or a proprietary system. According to a questionnaire administered to banks, a Read/Write API and proprietary system are each used by only two banks out of 129 banks surveyed (Fig. 3-9).

There are two retail payment infrastructure providers that provide services for connecting to a banks' core system as follows:

- (i) NTT Data Corporation (hereinafter referred to as "NTT Data"), which provides the Instant Payment Gateway Service for transmitting account transfer information as a service that utilizes a system known as the Credit and Finance Information Switching (CAFIS) system¹⁸;
- (ii) CARDNET Corporation (hereinafter referred to as "CARDNET"), which provides

¹⁷ Application Programming Interface: A connection method for the safe use of other systems or data. APIs used by banks consist of reference APIs that allow a connection to be established from an external service to the bank's system for making balance queries and otherwise obtaining account information and Read/Write APIs that enable deposit transfers and transfers between accounts to be undertaken as consented to by the client. This report, however, deals only with Read/Write APIs.

¹⁸ Credit and Finance Information Switching (CAFIS) system: Developed by the former Nippon Telegraph and Telephone Public Corporation, this system consists of a credit card information querying service provided these days by NTT Data but is also used as a means of connecting to a bank's core system for such transactions as account charging from bank accounts undertaken for code payment services.

the Real-Time Account Transfer Service for transmitting account transfer information as a service that utilizes a system known as CARDNET¹⁹.

Many banks have concluded an agreement for either the Instant Payment Gateway Service provided by NTT Data or the Real-Time Account Transfer Service provided by CARDNET. Thus, in the event that a nonbank code payment provider is instructed by a user to undertake account charging from a bank account, the service for which the bank that has the account linked by the user has concluded a contract will be used (Fig. 3-9). For either of these services, the CAFIS system as provided by NTT Data will be used to connect to the bank (Fig. 2-13).

C. Costs incurred for account charging and other transactions

Costs incurred when a nonbank code payment provider provides a service for account charging and other transactions based on the use of a credit card or ATM are as set forth in Fig. 2-12.

Fig. 2-12. Costs incurred by a nonbank code payment provider when providing a service for account charging and other transactions based on the use of a credit card or ATM

	Initial cost	Metered cost (per account charging or other transaction)
Credit card	None	(Fixed rate) Around 1.5% to 2% (For own cards, the fee is around 0.5% to 1%)
Cash account charging from ATMs	From millions of yen to tens of millions of yen	(Fixed rate + flat fee) Fee of less than 1% + 10-odd yen

On the other hand, costs incurred by a nonbank code payment provider and bank when services for account charging and other transactions from bank accounts are provided are as follows in (A) through (C).

(A) Costs that a nonbank code payment provider pays to a linked bank

According to a questionnaire administered to and interviews held with fund transfer service providers, nonbank code payment providers pay banks an initial connection

¹⁹ This system consists of a credit payment network that is operated by CARDNET Corporation and that connects credit card companies and member merchants to one another but is also used as a means of transmitting account transfer information to banks for such transactions as account charging from bank accounts undertaken for code payment services.

cost amounting to (i) tens of millions of yen in the case of a large bank, (ii) millions of yen in the case of a regional bank, or (iii) from zero yen to ten million yen in the case of an online bank, as well as a connection fee²⁰ each time account charging and other transactions are undertaken in order to enable users to undertake account charging and other transactions from their bank accounts.

(B) Costs paid by a nonbank code payment provider to a retail payment infrastructure provider

According to a questionnaire administered to and interviews held with fund transfer service providers and retail payment infrastructure providers, nonbank code payment providers pay retail payment infrastructure providers an initial installation fee (millions of yen) as well as an ongoing service usage fee.

(C) Costs paid by a linked bank to a retail payment infrastructure provider

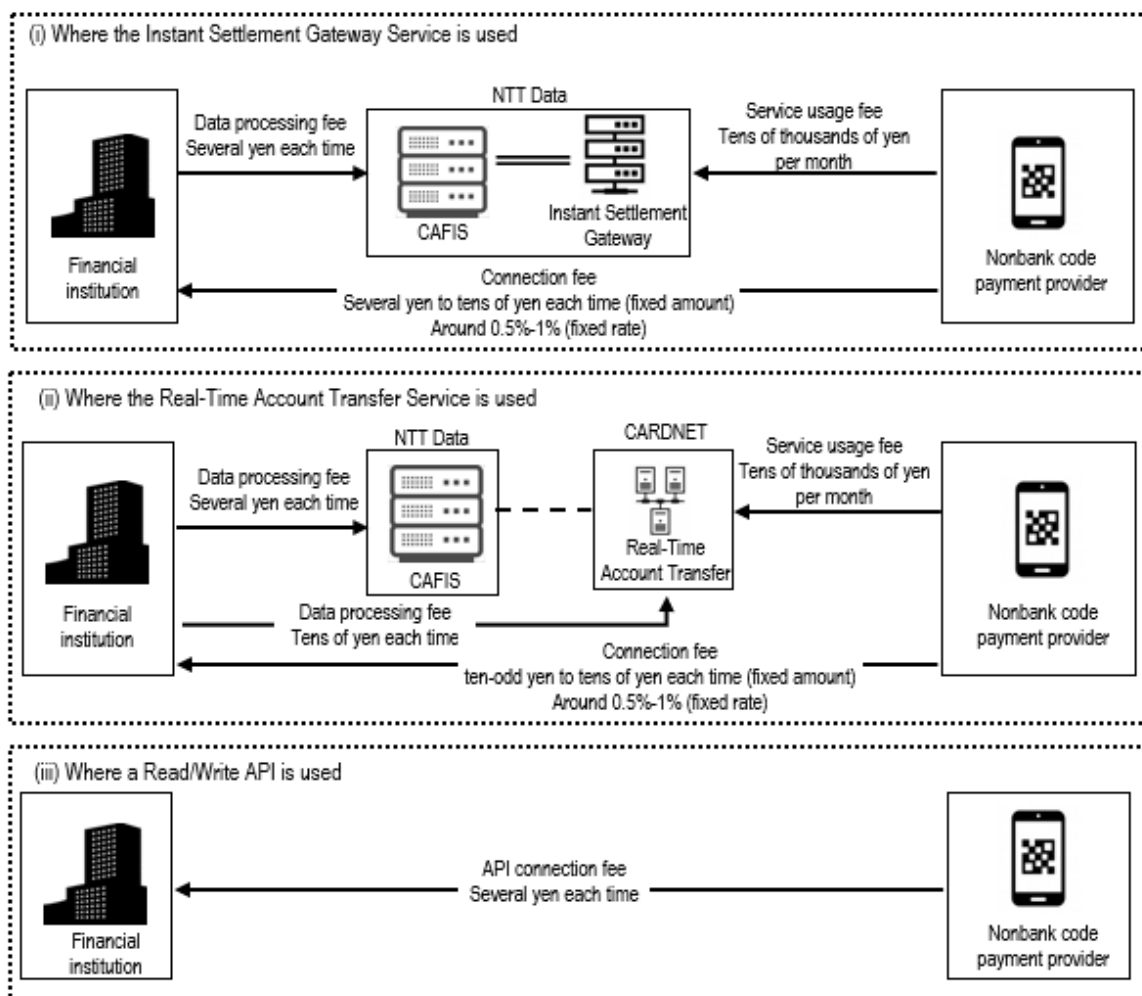
According to a questionnaire administered to and interviews held with banks and retail payment infrastructure providers, banks pay retail payment infrastructure providers construction costs when establishing a new connection to a bank and a data processing fee incurred each time a user undertakes account charging and other transactions. According to interviews held with banks, these bank-paid costs are covered by costs paid by nonbank code payment providers to banks as set forth in (A) above.

Based on (A) through (C) above, the transaction structure and cost structure applicable when a nonbank code payment provider uses a retail payment infrastructure or Read/Write API to provide account charging and other transactions are as set forth in Fig. 2-13.

Fig. 2-13. Transaction structure and cost structure pertaining to account charging and other transactions provided through the use of a retail payment infrastructure or

²⁰ A nonbank code payment provider also pays a bank costs ranging from ten-odd yen to several hundred yen each time a user's bank account is linked.

Read/Write API



(2) Transactions vis-à-vis users and transactions vis-à-vis member merchants

A. Transactions vis-à-vis users

(A) Number of users

According to a questionnaire administered to fund transfer service providers and banks, the number of users of code payment services provided by a major nonbank code payment provider ranged from hundred thousand or so users to tens of millions of users and the number of users of code payment services provided by a bank ranged from thousands of users to hundreds of thousands of users.

In addition, many banks and nonbank code payment providers indicated “Number of member merchants” as the most important factor for acquiring users of code payment services that they themselves provided, followed by “Security”, “Scale of the user reward program”, and “Ease of payment” (Fig. 2-14).

Likewise, in a questionnaire administered to consumers, many users indicated “Number of member merchants” as the most important factor when selecting a code payment service to use, followed by “Security” and “Scale of the user reward program” (Fig. 2-14).

Thus, for code payment services, it is thought that users are presented with a greater incentive to use a code payment service the greater the number of member merchants that exist (indirect network externality that transactions vis-à-vis member merchants have on transactions vis-à-vis users).

Fig. 2-14. Important factors in acquiring users (nonbanks and banks) and important factors in selecting code payment services (users) (multiple responses for both)

	Nonbanks	Banks	Users
Number of member merchants	7 (87.5 %)	61 (98.4 %)	2,738 (68.5 %)
Security	7 (87.5 %)	58 (93.5 %)	2,528 (63.2 %)
Scale of the user reward program	6 (75.0 %)	40 (64.5 %)	2,347 (58.7 %)
Ease of payment	6 (75.0 %)	50 (80.6 %)	2,233 (55.8 %)
Number of users	4 (50.0 %)	23 (37.1 %)	497 (12.4 %)
Real time	2 (25.0 %)	18 (29.0 %)	1,720 (43.0 %)
Provision of services based on the use of payment data	0 (0.0 %)	11 (17.7 %)	490 (12.3 %)
Availability of a charging means	—	—	1,684 (42.1 %)
Other factors (free description)	3 (37.5 %)	5 (8.1 %)	112 (2.8 %)
Number of responses	8	62	4,000

Source: Results of a questionnaire administered to fund transfer service providers, banks, and consumers

(B) Average amount of payment by users

According to a questionnaire administered to fund transfer service providers and banks, the average amount per payment made by a user of a code payment service provided by nonbank code payment providers was around 700 yen to 2,500 yen and the average amount per payment made by a user of a code payment service provided by banks was around 700 yen to 7,600 yen.

(C) Income from transactions vis-à-vis users

According to a questionnaire administered to fund transfer service providers and

banks, neither banks nor nonbank code payment providers were basically charging fees for the use of code payment services to users and neither earned any revenue from transactions vis-à-vis users.

However, many nonbank code payment providers indicated that they, in the event that a user refunds an amount from his or her own account balance to deposits or cash, charge the user several hundred yen per refund in order to cover any deposit transfer service fee or ATM usage fee incurred for the refund.

On the other hand, no example in which a user was charged a service fee to process a refund from his or her account balance to a bank account was revealed for code payment services provided by banks.

As part of code payment services provided by a bank, a cash-out service might be provided to users to allow them to withdraw cash from a ticket-vending machine or a member merchant's cash register. If a user were to use this service, the user would be charged several hundred yen per use.

(D) Costs incurred in transactions vis-à-vis users (user reward programs)

In order to acquire users, some code payment providers operate reward programs for users, such as by offering partial discounts and issuing points for amounts of code payment services used.

According to a questionnaire and interviews administered to fund transfer service providers, nonbank code payment providers offered refunds equal to between 0.5 percent and 3 percent of amounts used by users, organized limited-time campaigns, or issued coupons as part of a permanent reward program. In contrast, a questionnaire administered to banks revealed a limited number of examples in which refunds of about 0.5 percent of amounts used for certain code payment services were offered for code payment services provided by banks.

B. Transactions vis-à-vis member merchants

(A) Number of member merchants

According to a questionnaire administered to fund transfer service providers and banks, a nonbank code payment provider provides code payment services through around 30,000 merchants to 1.5 million merchants and a bank provides code payment services through around several thousand merchants to several tens of thousands of merchants.

According to a questionnaire administered to fund transfer service providers, "Number of users" was indicated more than any other factor as an important factor

for acquiring member merchants by nonbank code payment provider respondents, followed by “Low payment service fees” and “Security”. Similar results were obtained in a questionnaire administered to banks (Fig. 2-15).

Therefore, when it comes to code payment services, it is conceivably possible that there is a relationship in which the more users there are, the greater the incentive for member merchants to adopt code payment services (indirect network externality that transactions vis-à-vis users have on transactions vis-à-vis member merchants).

Fig. 2-15. Important factors for acquiring member merchants (multiple responses)

	Nonbanks	Banks
Number of users	8 (100.0 %)	52 (91.2 %)
Low payment service fees	6 (75.0 %)	52 (91.2 %)
Ease of payment	5 (62.5 %)	44 (77.2 %)
Security	5 (62.5 %)	43 (75.4 %)
Number of member merchants	4 (50.0 %)	34 (59.6 %)
Real time	4 (50.0 %)	14 (24.6 %)
Provision of services based on the use of payment data	3 (37.5 %)	12 (21.1 %)
Other factors (free description)	0 (0.0 %)	4 (7.0 %)
Number of responses	8	57

Source: Results of a questionnaire administered to fund transfer service providers and banks

(B) Income from transactions vis-à-vis member merchants (member merchant service fee)

Nonbank code payment providers and banks earn an income from collecting a certain amount of code payment sales proceeds from member merchants as a member merchant service fee in transactions vis-à-vis member merchants. According to a questionnaire administered to and interviews held with fund transfer service providers and publicly available materials, nonbank code payment providers collect a member merchant service fee ranging from 0 percent to about 3.5 percent if the fact that campaigns in which the member merchant service fee is waived for a limited time are sometimes held is taken into account.

At the same time, a questionnaire administered to and interviews held with banks revealed that banks that provide code payment services collect a member merchant service fee of about 1 percent to 3.5 percent and did not establish that there are any banks that carry out campaigns involving a waiver of member merchant service fees.

(C) Costs incurred in transactions vis-à-vis member merchants (deposit transfer service fee)

A nonbank code payment provider disburses member merchant account sales proceeds amassed through the use of code payment services into the member merchant's bank account according to a disbursement frequency determined in advance between the nonbank code payment provider and each member merchant (such as daily, monthly, or twice a month) (Fig. 2-16).

In disbursing sales proceeds into a member merchant's bank account, a nonbank code payment provider submits a request for a deposit transfer to an intermediate bank (Fig. 2-7). Interviews held with nonbank code payment providers suggest that intermediate banks are determined based on the level of the deposit transfer service fee presented by each bank.

[Example of an interview held with a nonbank code payment provider]

- The company has concluded agreements with several banks for the use of Internet banking services for corporations in order to disburse sales proceeds into member merchants' bank accounts. Where the company has concluded an agreement with the same bank as that of a given member merchant's bank account into which sales proceeds are to be disbursed, a deposit transfer request will be submitted to that bank since the deposit transfer service fee in such a case will be cheaper. If sales proceeds are to be disbursed to a bank with which an agreement has not been concluded, a deposit transfer request will be submitted to the bank with the lowest service fee charged for making interbank deposit transfers.*

Many nonbank code payment providers essentially assume the deposit transfer service fee incurred for making disbursements into member merchants' bank accounts themselves. On the other hand, there are also cases in which a disbursement can be made if a member merchant pays a nonbank code payment provider an amount equivalent to the deposit transfer service fee in the event that a member merchant wishes to have sales proceeds disbursed at a time of its choosing or in the event that the disbursement of sales proceeds falls short of a certain amount.

If a given member merchant's bank account into which disbursements are to be made is with a specific bank that belongs to a nonbank code payment provider's own corporate group or that is otherwise affiliated with a nonbank code payment provider, the nonbank code payment provider may in some cases allow daily disbursements without having a member merchant assume costs since deposit transfer service fees

in such a case would be cheaper.

On the other hand, many code payment services provided by banks allow for daily disbursements, such that no cases in which a member merchant assumed disbursement costs were seen.

Fig. 2-16. Frequency with which sales proceeds are disbursed to member merchants for each code payment service (multiple responses)

	Nonbanks	Banks
Daily	3 (Note 1)	8
Once a month	6	7
Twice a month	5	7
Three times a month	0	1
Disbursements at any time (for a fee)	3	0
Number of responses	8	9 (Note 2)

Note 1. Limited to disbursements into accounts with a specific bank that belongs to a nonbank code payment provider's own corporate group or that is otherwise affiliated with a nonbank code payment provider.

Note 2. Talled for each code payment service provided by a bank.

Source: Results of a questionnaire administered to fund transfer service providers and banks

(3) Transactions with which services based on the use of payment data are provided

In recent years, code payment providers have been increasingly seeking to provide marketing and other services based on the use of payment data amassed through transactions vis-à-vis users and transactions vis-à-vis member merchants to users, member merchants, and third parties.

According to a questionnaire administered to and interviews held with fund transfer service providers and banks, there are about ten code payment providers – both nonbanks and banks – providing services whereby payment data are harnessed for marketing by member merchants. At the same time, these services are provided free of charge and no providers were found obtaining consideration for the provision of these services.

In interviews held with fund transfer service providers and banks, the following views on the profitability of services based on the use of payment data were given.

[Example of an interview held with a bank]

- *We are internally looking into business based on the use of payment data. However, while we know the answers to the questions of when, where, who, and how much as concerns the use of*

our payment services, we do not know the answer to the key question of what was purchased. For this reason, we cannot use payment data to expand our business. Thus, we believe that the establishment of a business based on the use of payment data is currently a rather difficult proposition.

[Example of an interview held with a code payment provider]

- *While we have explored the possibility of providing services based on the use of payment data, there is currently no course that has been set for monetization. If we were to acquire the personal information of users and – for example – provide advertising services directed at individuals, the consent of individuals with respect to the secondary use of provided information would become an issue, which means that, if anything, we might end up going in a direction whereby the results of the statistical processing of payment data in Big Data sets are sold to commercial interests and businesses.*

(4) Revenue structure at code payment providers

Based on the business relationships mentioned in (1) through (3) above, the state of costs and revenues generated by code payment providers is as outlined in Fig. 2-17.

Fig. 2-17. Revenue structure at code payment providers (excluding internal costs)

	Cost	Revenue
Account charging and other transactions	(Incurred only by nonbank code payment providers) Costs for undertaking account charging and other transactions from, for example, users' bank accounts	–
Transactions vis-à-vis users	User reward programs	–
Transactions vis-à-vis member merchants	(Incurred only by nonbank code payment providers) Deposit transfer service fee for disbursing sales proceeds into member merchants' bank accounts	Member merchant service fee
Payment data transactions	–	–

Of these, the following costs are not, in principle, incurred in the event that a bank provides code payment services:

- (i) Costs to enable users to undertake account charging and other transactions from, for example, their own bank accounts
- (ii) Deposit transfer service fee to enable users to disburse sales proceeds amassed through the use of code payment services into member merchants' bank accounts

These costs are incurred as expenses specific to nonbank code payment providers.

In Chapter 3 below, the impact that business relationships arising in account charging and other transactions and deposit transfer transactions have on the competitive relationships between banks and nonbank code payment providers will be ascertained.

Chapter 3: Situation regarding account charging and other transactions and deposit transfer transactions

1. Account charging and other transactions

(1) Vertical and horizontal business relationships between banks and nonbank code payment providers

As stated in 2(1) of Chapter 2 above, since bank accounts accept users' wages and other sources of income, a bank can, if it wishes to provide code payment services, provide code payment services with the balance of each user's bank account as opened with the bank constituting a payment means.

On the other hand, current laws and regulations do not, in principle, allow for the depositing of wages into something that is not a bank account, such as an account for code payment services provided by a fund transfer service provider. On this matter, a questionnaire administered to consumers revealed that approximately forty percent of users would consider depositing a portion of their wages into an account for code payment services that they personally use (Fig. 3-1).

Fig. 3-1. If it became possible to pay wages into an account with a nonbank code payment provider, would you consider having a portion of your wages deposited into a code payment account that you use?

Contents of response	Users
Would consider	1,594 (39.9 %)
Would not consider	2,406 (60.2 %)
Number of responses	4,000

Source: Results of a questionnaire administered to consumers

However, since wages and other sources of income are not generally accepted into a user's account managed by nonbank code payment providers at present, it is difficult for nonbank code payment providers to provide code payment services unless one of the methods of undertaking account charging and other transactions outlined in Fig. 2-8 is used and a connection is made to the user's bank account into which proceeds constituting the payment means for code payment services are deposited.

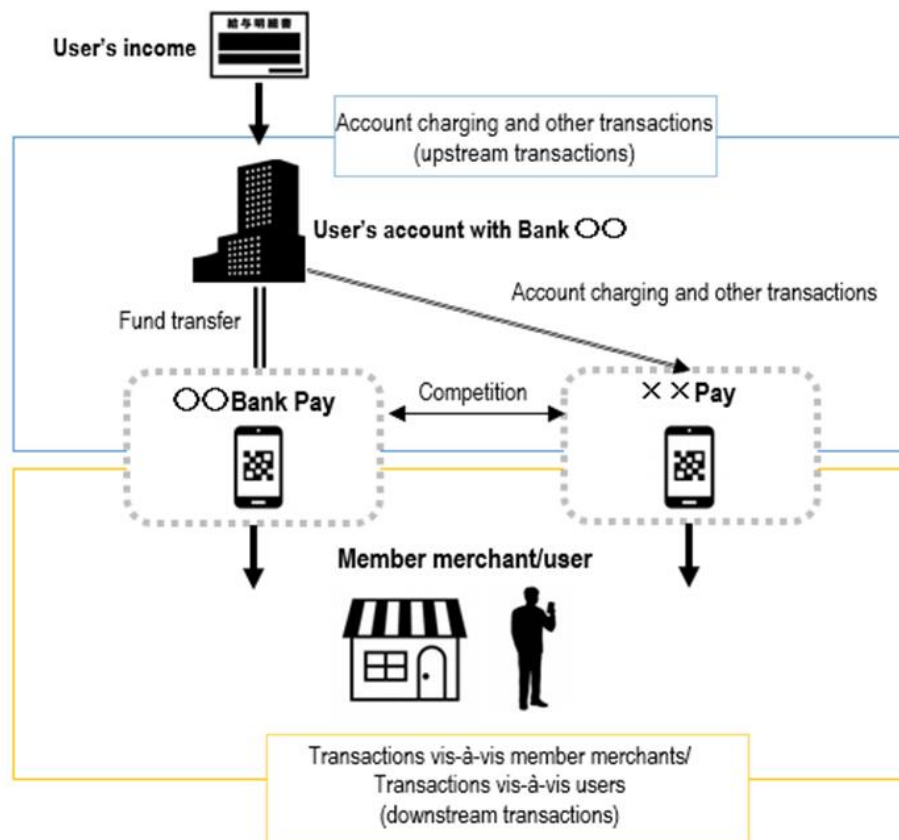
In light of the above, it is understood that the following relationships have formed between code payment service-providing banks and nonbank code payment providers:

- (i) A vertical business relationship (upstream-downstream relationship) in which no payment means can be secured unless the nonbank code payment provider links to the

user's bank account;

- (ii) A horizontal competitive relationship in transactions vis-à-vis users and transactions vis-à-vis member merchants (Fig. 3-2).

Fig. 3-2. Vertical and horizontal business relationships between banks and nonbank code payment providers



Source: Produced by the Japan Fair Trade Commission based on a questionnaire administered to fund transfer service providers and banks

As described above, one can connect to a user's bank account by undertaking account charging and other transactions from the user's bank account. One can also undertake account charging and other transactions using a credit card to withdraw the amount used from a bank account or undertake account charging using cash withdrawn from a bank account as alternative ways of connecting to the user's bank account.

When a user undertakes account charging and other transactions from a credit card, however, a nonbank code payment provider is required to pay approximately 1.5 to 1.9 percent of the amount involved to the credit card company (Fig. 2-12), which is an amount that in some cases exceeds the cost that is assumed where account charging and other transactions are undertaken from a bank account as indicated in Fig. 2-13 (fixed amount: several yen to tens of yen; fixed rate: around 0.5 percent to 1.0 percent). In such a case, if a nonbank code payment provider is somehow rendered unable to undertake account

charging and other transactions from a bank account and account charging and other transactions from credit cards account for a higher percentage of code payment services used than before, code payment costs will rise and the nonbank code payment provider will likely be placed at a competitive disadvantage.

In interviews held with nonbank code payment providers, opinions expressed suggest that the undertaking by a user of account charging with cash obtained from an ATM provides a low level of convenience to the user since ATM usage service fees are incurred whenever cash for undertaking account charging is withdrawn and since, unlike account charging and other transactions undertaken from a bank account, a user is unable to issue instructions for undertaking account charging through just a payment app but must instead expend time and effort to operate an ATM.

[Example of interviews held with nonbank code payment providers]

- *If a user can only undertake account charging using credit cards, costs will be greater than the cost of undertaking account charging directly from bank accounts, which will force us to consider changing our business model. For us, when it comes to the undertaking of account charging by users, we welcome the undertaking of account charging through the use of a credit card initially whereas we ultimately hope to induce users to undertake account charging from their bank accounts. To this end, we highlight differences between the undertaking of account charging from bank accounts and the undertaking of account charging from credit cards in promotions directed at users.*
- *The ability to undertake account charging from an app is highly convenient for users. If it became no longer possible for a user to undertake account charging from his or her bank account, it is questionable whether a user who used to go online to undertake account charging from his or her own bank account will bother physically going to an ATM to undertake account charging.*
- *If one undertake account charging from a bank account, one can undertake account charging at any time and from anywhere by using a smartphone. In contrast, account charging based on the use of an ATM cannot be undertaken if there is no ATM nearby when one want to undertake account charging and is generally inconvenient for the user compared with account charging from a bank account. Also, if one undertake account charging using an ATM, the user will need to use an ATM in advance to withdraw cash from his or her deposit account, which means that an ATM user fee is often levied against the user. It is hard to imagine that payment service users who typically use such services for purchases amounting to several thousand yen each time will proactively choose a means of charging that incurs an ATM user fee of 200 yen per withdrawal.*

In light of the above, given that a user's wages and other types of income are essentially received these days when they are deposited into a bank account, the undertaking of account charging and other transactions from bank accounts constitutes a method of account charging and other transactions that is exceedingly important for nonbank code payment providers.

Therefore, it is generally conceivable that, under the transaction structure outlined in Fig. 3-2, a bank that provides its own code payment services can, by undertaking the following, enhance the competitiveness of its own code payment services for downstream transactions and facilitate the generation of incentives to reject nonbank code payment providers:

- (i) Render it impossible for users who have their own deposit accounts from undertaking account charging and other transactions to nonbank code payment providers by blocking nonbank code payment providers from connecting to the deposit accounts of users in upstream transactions;
 - (ii) Raise account charging service fees to increase costs incurred by nonbank code payment providers with whom the bank is in a competitive relationship.
- (2) Necessity of transactions with banks in account charging and other transactions

In interviews held with major nonbank code payment providers, respondents indicated that they felt it was essentially difficult to cancel the provision of account charging and other transactions from accounts with specific banks and switch to a method of undertaking account charging from another bank account or another method of undertaking account charging and other transactions.

Some main reasons for this difficulty insisted from the nonbank code payment providers are as follows: (i) it is difficult to switch to a method of undertaking account charging and other transactions not involving a bank account for fulfilling the obligations of checks in transactions under the Act for the Prevention of Transfers of Criminal Proceeds, (ii) there are banks with a large share of account charging and other transactions from bank accounts, (iii) there are initial costs that are difficult to recover, and (iv) it is necessary, from the viewpoint of consumer behavior concerning the undertaking of account charging and other transactions from bank accounts, to undertake account charging and other transactions from bank accounts of specific banks.

A. Carrying out a mandate to conduct a check at the time a transaction is undertaken

Under the Act for the Prevention of Transfers of Criminal Proceeds, a major nonbank code payment provider or a fund transfer service provider registered by a subsidiary

thereof is obligated to conduct a check of a user's identity each time a transaction is undertaken.

In carrying out its obligation to check identification, a major nonbank code payment provider typically carries out its obligation to check identification by obtaining, at the time a user links with a bank account, information on the confirmation of the identity of the user as performed by the linked bank at the time the account in question was opened. If it is not possible to rely on the bank's performance of an identity check, however, this process will need to be undertaken through a separate method of carrying out a personal identification check online (e-KYC) or via the postal system²¹, for which reasonable costs will be incurred.

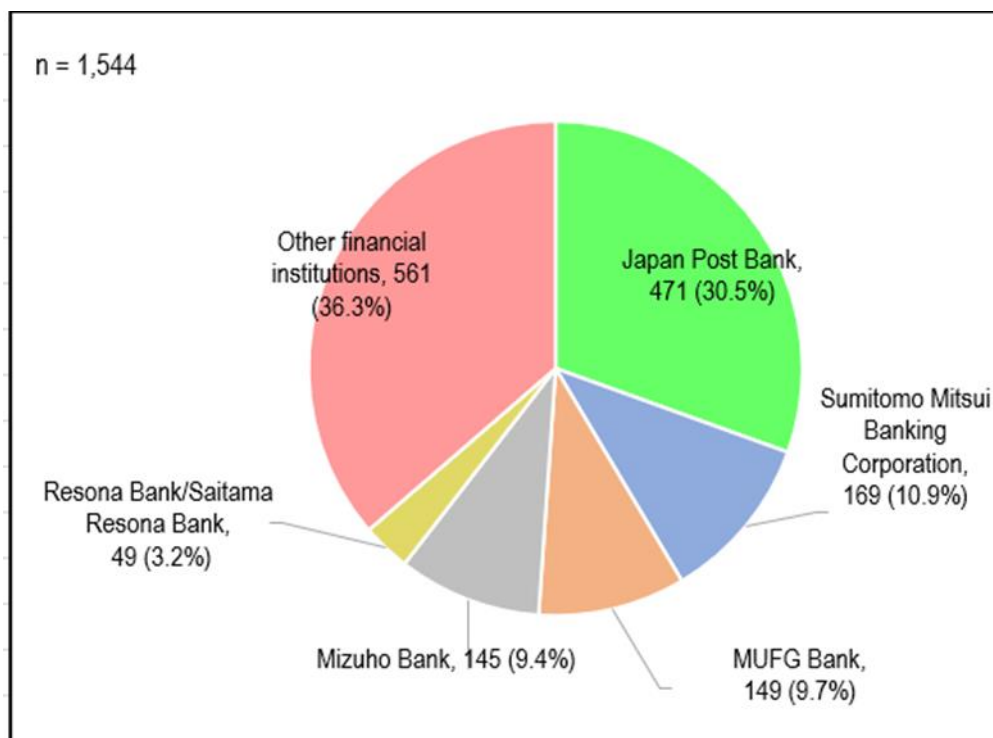
It is believed that the provision of services for undertaking account charging and other transactions from bank accounts and the reliance on identity checks conducted by banks without adopting a method of undertaking account charging and other transactions from an option other than bank accounts, such as credit cards or cash, will increase the need for transactions with banks in order to simplify for nonbank code payment providers the obligation to conduct a check at the time of a transaction and enable the assumption of costs to be lowered through the adoption of a separate method of conducting a check at the time of a transaction.

B. Existence of banks with a large share of all account charging and other transactions undertaken from bank accounts

A questionnaire administered to consumers revealed that a bank is selected by more than thirty percent of users as a bank at which linked bank accounts are opened (Fig. 3-3).

²¹ While a fund transfer service provider can, under the law, rely on the performance of an identity check by a credit card company, carrying out a foreign exchange transaction after account charging has been undertaken against the account balance of the fund transfer service provider from a credit card constitutes an act corresponding to the conversion of the credit limit on a credit card to cash and is thus not normally done; account charging from a credit card is only done as account charging against an account balance on the part of a third-party payment issuer.

Fig. 3-3. Linked bank accounts for code payment services that are most frequently used (most frequently used where there are multiple linked bank accounts)



Source: Results of a questionnaire administered to consumers

In a questionnaire administered to fund transfer service providers, multiple nonbank code payment providers indicated that the amount of account charging and other transactions from specific banks sometimes accounted for twenty percent of the total amount of account charging and other transactions undertaken by users.

For nonbank code payment providers, by conducting transactions with a large or leading share of bank accounts with which users undertake account charging and other transactions, it is expected that the use of code payment by users of the bank will increase. As a result, the amount and frequency of code payment service usage will increase, which will increase the need to engage in transactions.

C. Existence of an initial connection cost

As stated in 2 (1) C (A) of Chapter 2 above, where a nonbank code payment provider provides a service for undertaking account charging and other transactions from a bank account to a user, the nonbank code payment provider will pay an initial connection cost amounting to tens of millions of yen in the case of a large bank and millions of yen in the case of a regional bank.

This initial connection cost is a cost that cannot be recovered when canceling the provision of a service for undertaking account charging and other transactions from a bank (sunk cost) and is also a cost that is incurred each time the provision of a service for undertaking account charging and other transactions from a specific bank is canceled and a service for undertaking account charging and other transactions from another bank is then provided (switching cost). Therefore, the existence of an initial connection cost is believed to increase, for a nonbank code payment provider, the necessity of maintaining transactions with a bank with which the nonbank code payment provider has established a connection once this connection has been established.

D. Consumer behavior pertaining to account charging and other transactions from bank accounts

In a questionnaire for consumers, it was revealed that approximately half of users who use a service for undertaking account charging and other transactions from a bank account treated the bank account into which their main sources of income such as wages were deposited as a linked bank account (Fig. 3-4). In addition, users who indicated that they had changed their linked bank account accounted for only a little more than ten percent of all respondents (Fig. 3-5), approximately seventy percent of whom explained that they changed their linked bank account either because the bank account into which their main sources of income were being deposited came to accommodate account charging and other transactions for code payments or because they had changed the bank account into which their main sources of income were being deposited (Fig. 3-6).

Fig. 3-4. Do you use the deposit transfer account for your main sources of income (such as wages) as a linked bank account to be used for account charging and other transactions?

Contents of response	Users
Yes	802 (51.9 %)
No	742 (48.1 %)
Number of responses	1,544

Source: Results of a questionnaire administered to consumers

Fig. 3-5. Have you ever changed the linked bank account you use for account charging and other transactions?

Contents of response	Users
Yes	215 (13.9 %)
No	1,329 (86.1 %)
Number of responses	1,544

Source: Results of a questionnaire administered to consumers

Fig. 3-6. Why did you change the linked bank account you use for account charging and other transactions?

Contents of response	Users
The bank account into which my main sources of income are deposited came to accommodate account charging and other transactions for code payment services.	112 (52.1 %)
I changed the bank account into which my main sources of income are deposited.	45 (20.9 %)
I felt that there were security risks in undertaking account charging and other transactions from my bank account.	17 (7.9 %)
No particular reason.	36 (16.7 %)
Other.	5 (2.3 %)
Number of responses	215

Source: Results of a questionnaire administered to consumers

Based on the results of the aforementioned questionnaire, it is believed that users tend to choose the deposit transfer account into which their main sources of income such as wages are deposited as a linked bank account, tend to refrain from changing a bank account once it has been linked, and tend to change a linked bank account, where applicable, for the purpose of linking the deposit transfer account they use for their main sources of income. These user tendencies are believed to make it more necessary for nonbank code payment providers to undertake account charging and other transactions with banks with whom many users have opened up deposit transfer accounts for their main sources of income.

That users tend to seek to undertake account charging and other transactions from deposit transfer accounts for their main sources of income is potentially a factor impeding efforts on the part of nonbank code payment providers to encourage users who have already linked a bank account to undertake account charging from another

bank account. It is believed that this tendency makes it more necessary to continue engaging in transactions with specific banks.

On this point, the following opinions were revealed in interviews held with nonbank code payment providers.

[Examples of interviews held with nonbank code payment providers]

- *Since a user with a linked bank account uses the most convenient account they normally use as an account with a connected bank, it would seem that there is little chance that the user, faced with an inability to link with his or her bank account, would change his or her account with his or her main bank to an account with another bank just to use our services.*
- *We once attempted to reduce the burden of paying service fees for account charging paid to banks by holding a campaign through which cash gifts were issued to users who registered an account with a bank whose service fees for account charging were relatively low. However, while users did in fact register accounts with banks targeted by the campaign, users generally went back to undertaking account charging from originally linked bank accounts after the campaign ended, such that the campaign yielded little in the way of positive benefits. Due to this experience, we believe that it is difficult to incentivize users to go with accounts with banks that impose low service fees for account charging.*

E. Summary

While blanket judgements cannot be made on this point since account charging and other transactions between banks and nonbank code payment providers differ in terms of the details of individual transactions, points made in A through D above suggest that there is a high level of need on the part of nonbank code payment providers to engage in transactions with specific banks and that the difficulty of continuing to undertake account charging and other transactions with a given bank could substantially impede business management for nonbank code payment providers.

(3) Examples of transactions in undertaking account charging and other transactions

A. Refusing a transaction

In a questionnaire administered to fund transfer service providers, five out of eight major nonbank code payment providers indicated that they cannot permit transactions pertaining to account charging and other transactions undertaken from bank accounts or that negotiations to enable account charging and other transactions undertaken from bank accounts have been shelved.

On the other hand, there were no cases revealed in which transactions pertaining to

account charging and other transactions were not permitted by credit card companies or other nonbank providers of means of undertaking account charging and other transactions.

In interviews held with nonbank code payment providers, the following examples of cases in which transactions with banks were not allowed were indicated.

The following examples include cases in which nonbank code payment providers came to be granted permission to undertake transactions by banks after this survey was already underway.

[Examples of interviews held with nonbank code payment providers]

○ Case A

- *While negotiations to connect with Bank A have been going on for more than a year, we see no signs that an agreement will be reached any time soon. In these connection-related negotiations, we have been told that a connection fee equivalent to the payment service fee paid by major member merchants is required for code payment services provided by Bank A and that terms and conditions call for the payment of 300 yen per month per linked account for what is called an account maintenance service fee.*
- *If we were to undertake transactions at the amount presented by Bank A, we would surely go bankrupt in a year since we would suffer clear deficits just by connecting with Bank A that would wipe away all of our profits.*
- *In engaging in negotiations to connect with Bank A, the person in charge of code payment services provided by banks is in charge of negotiations rather than the corporate sales department, which is in charge of the sales of regular account transfer services. We find ourselves having to negotiate connection conditions with persons in charge of competing services.*

○ Case B

- *We continue to hold talks with Bank B and the bank is studying the terms and conditions of the agreement. That said, we don't know when the contract terms will be presented.*
- *While I don't remember the specific phrasing that was used, I recall being told by someone at Bank B that they do not want to "show humanity even to their enemy". I believe that this sentiment specifically reflects concern on their part that we might eat away at their exchange transactions.*

○ Case C

- *We are required to pay an account charging service fee as a connection fee whenever account*

charging is undertaken from Bank C; this account charging service fee is several times greater than our member merchant service fee. And while we submitted a request to Bank C to open up a corporate account to allow us to at least deposit transfers to member merchants within the same bank, they are not even able to look into granting us this request since we are a fund transfer service provider.

According to a questionnaire administered to banks, factors cited as being important when allowing nonbank code payment providers to undertake account charging and other transactions are “security” and “economic contract terms and conditions” (Fig. 3-7).

Fig. 3-7. Factors that are important when allowing nonbank code payment providers to undertake account charging and other transactions from bank accounts (multiple responses)

Means of connection	Banks
Security system of the nonbank code payment provider	95 (92.2 %)
Account charging service fee and other economic contractual terms and conditions	90 (87.4 %)
Handling by the nonbank code payment provider to deal with money laundering	58 (56.3 %)
Other factors (free description)	30 (29.1 %)
Total responses	103 (note)

Note: According to a questionnaire administered to banks, there were twenty-six banks that do not accommodate account charging and other transactions undertaken from bank accounts.

Source: Results of a questionnaire administered to banks

On the other hand, interviews held with banks did not reveal any cases in which security was indicated to a nonbank code payment provider as a reason for rejecting account charging and other transactions undertaken from bank accounts. In contrast, some banks stated that they do not allow nonbank code payment providers whose services compete with code payment services that they themselves provide to undertake account charging and other transactions for reasons of business strategy.

[Examples of interviews held with banks]

- *While we focus on security matters when we determine whether or not to allow connections with nonbank code payment providers, we have never rejected transactions on grounds relating to the security system in place. Nevertheless, there was a time when a provider with whom we*

had been engaging in negotiations for transactions caused a security issue with regard to a matter unrelated to our operations; the provider in question then offered to conduct a security review and the conclusion of the contract was postponed accordingly.

- Since the level of security at even major nonbank code payment providers sometimes falls short of the level required by banks, we have made requests for an enhancement of security standards in negotiations with nonbank code payment providers to ensure compliance with the level we require.*
- We are sometimes approached by a nonbank code payment provider that wishes to undertake account charging that is linked to our accounts. At the same time, we believe that our code payment services can compete with the code payment services of nonbank providers even if connections with nonbank code payment providers were allowed so long as a certain number of member merchants has been obtained for the code payment services we provide. At the moment, however, we believe that it is still too early for connections since granting account charging permission to nonbank code payment providers will cause users to use only code payment services provided by nonbank providers. We provide code payment services in order to eventually provide payment data-utilizing services. However, if we were to begin connecting with nonbank code payment providers at this stage, nonbank code payment providers alone would end up obtaining payment data relating to member merchants and users, which in turn would thwart our code payment strategy of utilizing payment data and render the provision of code payment services on our part meaningless.*

B. Fee-increase requests

In a questionnaire administered to fund transfer service providers, four major nonbank code payment providers indicated that they had received requests to increase the service fee on account charging and other transactions undertaken from banks in the last year.

On the other hand, there were no cases in which a fee-increase request was made by a credit card company or other nonbank entity providing a method of undertaking account charging and other transactions.

The contents of explanations for fee-increase requests made by banks as received by nonbank code payment providers that indicated that they had received a fee-increase request in the last year in the aforementioned questionnaire are as set forth in Fig. 3-8. There were even fee-increase requests received because “the bank provides cashless payment services that compete with our own services”.

Fig. 3-8. Contents of explanations received from banks to justify fee-increase requests (multiple responses)

Contents of response	Nonbanks
Costs pertaining to the provision of account charging from the bank have increased.	2
Costs incurred by the bank for transfer services used in providing means of account charging have increased.	2
The bank provides cashless payment services that compete with our own services.	2
The bank's earning situation has worsened.	2
The bank has undertaken new investments.	1
Others.	1
Number of responses	4

Source: Results of a questionnaire administered to fund transfer service providers

In interviews held with nonbank code payment providers, there were also cases in which a bank requested a service fee pertaining to account charging and other transactions at a level that exceeded the member merchant service fee for code payment services provided by the bank.

[Example of an interview held with a nonbank code payment provider]

○ Case D

- *We received a request from Bank D to raise the level of service fees pertaining to account charging and other transactions to about five times the current level. The given service fee level would exceed the member merchant service fee rate for code payment services provided by Bank D in light of the average amount of account charging to our services from Bank D.*
- *Bank D intended to mandate a fee increase on the grounds that “while a fee increase might increase cancellations and the burden on users and thereby leave a bad taste in our clients’ mouths, the impact would be minor and has been factored in” and that “while we will listen to proposed alternatives to a service fee increase, we do not believe that this process will be meaningful”. However, the bank suddenly toned things down and renewed the contract in question with the service fee in question maintained at the current level.*

On the other hand, in interviews held with banks, reasons given for raising service fees pertaining to account charging and other transactions were as follows: they are renegotiating fees that have traditionally been set below cost, they are seeking to pass

on the burden of funding anti-money laundering measures (AML)²², and there is a need to raise fees in order to factor in compensation to be paid out to users in the event that spoofing losses are sustained in the provision of a code payment service by a nonbank code payment provider.

[Examples of interviews held with banks]

- *When we began connecting with nonbank code payment providers, we were discounting connecting fees for accounts with our bank after taking into account the fact that it was the dawn of the era of cashless payments. However, after cashless payments became more widespread thereafter, we felt that we would like to at least have costs incurred for providing account charging from accounts with our bank to be covered.*
- *The costs that are internally incurred by banks to provide account transfer services and that we are being called upon to cover consists of traditionally incurred capital investment costs for direct systems, costs required for back-office sections and operations, and maintenance costs, as well as, more recently, costs incurred by a financial action task force (FATF) to assess Japan and costs for carrying out AML measures.*
- *Where there have been recent cases of fraudulent payments being made by perpetrators impersonating depositors with accounts with our bank and linking accounts to ○○ Pay and other payment services, costs that we incur to deal with fraud, such as through the issuance of payments of compensation to affected depositors, are growing in cases where compensation has not been provided by nonbank code payment providers. We believe that we have no choice but to factor in such costs for dealing with fraud by conservatively levying service fees for account charging in advance. Nevertheless, we have not been providing explanations of the basis for presented fees to nonbank code payment providers in negotiations concerning fees pertaining to account charging.*

On the other hand, according to interviews held with AML countermeasures support service providers, it was indicated that costs assumed for AML countermeasures refunded per transaction are not always large. Some banks also indicated that incorporating, in advance, an amount of compensation payable to users in the event that fraudulent use has occurred into service fees pertaining to account charging and other transactions as paid by nonbank code payment providers impairs trust in business relationships with nonbank code payment providers.

²² Refers to a set of measures dealing with transactions, deposit transfer fraud, load fraud, and other such cases of improper account transactions perpetrated by antisocial forces, terrorist organizations, criminal organizations, and other such groups.

[Example of an interview held with an AML countermeasures support service provider]

- *While the costs of AML countermeasures vary according to the size of the business, the volume of transactions, and the contents of a risk assessment report, they are not of an amount that will have a significant impact when they are refunded per transaction. At the very least, since they are of an amount that is not at all like that of costs paid by a bank for operating and building a core system, it is unlikely that they are exceptionally high for banks.*

[Example of an interview held with a bank]

- *At present, we have not given any consideration to raising, in advance, service fees for account charging for the purpose of ensuring that we can cover costs in the event that a nonbank code payment provider fails to compensate a user for losses sustained as a result of improper use. Indeed, it would seem that the act of raising service fees for account charging for this reason and thereby increasing revenue to act as a buffer would impair relationships of trust with other parties.*

C. Attracting new member merchants, assuming campaign costs, and requesting the provision of payment data

Interviews held with banks revealed cases in which the followings were, as examples, requested as conditions for enabling account charging and other transactions to be undertaken from bank accounts: code payment services provided by the bank for free shall be introduced whenever the nonbank code payment provider undertakes to attract new member merchants, a joint campaign shall be carried out with code payment services provided by the bank after the nonbank code payment provider assumes campaign costs in full, and payment data shall be provided for free by the code payment provider to the bank.

[Example of an interview held with a bank]

○ Case E

- *We negotiated connection with nonbank code payment provider E and laid out the following as conditions for connection: (i) code payment services that we provide for free shall be offered at the same time during certain periods when E plans to attract new member merchants, (ii) a campaign for which points are to be granted where any user who has downloaded E's payment app downloads our payment app shall be held with costs assumed by E in full, and (iii) E's payment data shall be provided to us for free.*

(4) Retail payment infrastructure-related transactions

A. Agreements concluded by banks with retail payment infrastructure providers

As set forth in 2 (1) B of Chapter 2 above, a nonbank code payment provider needs to connect to a bank's core system in order to transmit requests for account charging received from users through its own payment app in the event that it provides services for undertaking account charging and other transactions from bank accounts.

According to a questionnaire administered to banks, most banks provide a means of connection pertaining to account charging and other transactions from bank accounts to nonbank code payment providers by way of a method based on the use of a retail payment infrastructure provider. Banks that provide a means of connection for account charging and other transactions through the use of a Read/Write API or proprietary system are limited in number (Fig. 3-9).

In addition, CAFIS has effectively become an indispensable retail payment infrastructure for the provision of any service for account charging and other transactions undertaken from bank accounts by a nonbank code payment provider since, as stated in 2 (1) B of Chapter 2 above, the provision by a bank of any connection through a retail payment infrastructure provider has to be done through CAFIS.

Fig. 3-9. Methods used by banks to connect with retail payment infrastructure providers

Contents of response		Banks
Connection means based on the use of a retail payment infrastructure provider	(i) Instant Payment Gateway Service provided by NTT Data	50 (38.6 %)
	(ii) Real-Time Account Transfer Service provided by CARDNET	43 (33.3 %)
	Both (i) and (ii)	6 (4.7 %)
Connection means based on the use of a Read/Write API		2 (1.6 %)
Connection means based on the use of a proprietary system		2 (1.6 %)
No connection means provided		26 (20.2 %)
Number of responses		129

Source: Results of a questionnaire administered to banks

In interviews held with banks, concern over productivity due to the high costs of developing an API infrastructure was cited as a reason for the low rate at which connection means based on the use of a Read/Write API was provided.

[Examples of interviews held with banks]

- *The adoption of a Read/Write API with functionality for deposit transfer requests costs more than we imagined, such that not even relatively large banks can afford to proceed.*
- *Realistically speaking, we believe that there are not necessarily many nonbank code payment providers that will come to us with a request to us for connections based on the use of a Read/Write API. It is likely that profitability concerns account for the lack of real progress concerning the development of a Read/Write API connection infrastructure on the part of any bank in the industry.*

In contrast, a questionnaire administered to fund transfer service providers generated responses that indicated that a majority of nonbank code payment providers would like to use a Read/Write API if banks made it possible to provide a means of connection for account charging and other transactions based on the use of a Read/Write API. On the other hand, every nonbank code payment provider that indicated that they would not use such a means of connection explained that their concern with respect to the utilization of a Read/Write API was tied to the fact that connection infrastructure specifications are not fully unified (Fig. 3-10).

Fig. 3-10. Looking into the possibility of using a Read/Write API-based connection means for account charging and other transactions if made available by a bank

Contents of response	Nonbanks
We will look into the possibility of using	5
We will not look into the possibility of using	3
Number of responses	8

Source: Results of a questionnaire administered to fund transfer service providers

[Examples of interviews held with nonbank code payment providers]

- *In the past, we had expected to see fees for account charging with a Read/Write API go down but, with the situation with respect to the development of a Read/Write API-based connection infrastructure being poor and given the level of fees for account charging as presented by banks and the time and effort needed to make overlapping capital investments due to differences in specifications, the current reality is that it is cheaper to continue using a legacy infrastructure like CAFIS, which constitutes an infrastructure through which CARDNET and NTT Data provide services.*
- *Since the need for different banks to develop separate systems in line with different API*

specifications has arisen and since the possibility that significant cost advantages stemming from the development of such a system can be obtained is low, we will not look into a Read/Write API-based connection means.

- *While there would be some point for a bank to look into this matter if the specifications applicable to provided APIs were shared, development work corresponding to each bank would need to be undertaken if specifications differ from bank to bank. Thus, we don't believe there is any reason for these to be proactively utilized.*

In this survey, given that CAFIS constitutes a retail payment infrastructure that is currently considered to be effectively indispensable for the provision of services by a nonbank code payment provider for undertaking account charging and other transactions from bank accounts, we conducted an investigation that focused on CAFIS below.

B. Transactions for which a retail payment infrastructure is used

In looking at overall numbers of cases involving the processing of services based on the use of a retail payment infrastructure, we see that the number of cases processed monthly increased by about three times from 283.90 million in fiscal year 2008 to 804.01 million in fiscal year 2018 for CAFIS and that the number of cases processed annually likewise increased by about three times from 4,700 million cases in fiscal year 2008 to 17,900 cases in fiscal year 2018 for CARDNET (Fig. 3-11).

In breaking these numbers down, we understand that the volume of transactions involving the Instant Payment Gateway Service provided by NTT Data increased by almost six times from fiscal year 2016 to fiscal year 2018 while the volume of transactions involving the Real-Time Account Transfer Service provided by CARDNET increased by almost three times from fiscal year 2016 to fiscal year 2018 (Fig. 3-12).

As stated in 2 (1) B of Chapter 2 above, since the provision by a bank of connections through a retail payment infrastructure provider is done through CAFIS, the volume of CAFIS transactions pertaining to account charging transactions is on the rise.

Fig. 3-11. Changes in the volume of transactions involving CAFIS and CARDNET

	FY 2008	FY 2018
CAFIS Center (number of cases processed annually (x 10,000))	321,152	877,600
CARDNET Center (number of cases processed annually (x 10,000))	Approx. 470,000	Approx. 1,790,000

Source: Produced by the Japan Fair Trade Commission based on interviews held with and materials published by retail payment

infrastructure providers

Fig. 3-12. Changes in the volume of transactions through the Instant Payment Gateway Service and the Real-Time Account Transfer Service

		FY 2016	FY 2017	FY 2018
Instant Payment Gateway Service	Number of cases processed annually (x 10,000)	350	1,020	2,020
	Index	100	291.4	577.1
Real-Time Account Transfer Service	Number of cases processed annually (x 10,000)	Not publicly disclosed	Not publicly disclosed	Not publicly disclosed
	Index	100	156.6	253.9

Note 1: Number of cases processed annually from April of each year to March of the following year for the Instant Payment Gateway Service and from October of each year to September of the following year for the Real-Time Account Transfer Service.

Note 2: For the index, the number of processed cases for the given service in fiscal year 2016 is set to a reference value of 100.

Source: Produced by the Japan Fair Trade Commission based on questionnaires administered to and interviews held with retail payment infrastructure providers

C. Features of transactions undertaken through CAFIS

CAFIS is an information data communication system developed by Nippon Telegraph and Telephone Public Corporation (currently NTT Data) in 1984 to process credit card payments. These days, two broad types of data communication services pertaining to credit cards and fund transfers are provided through a shared infrastructure consisting of the CAFIS Center System; various individual services, including the Instant Payment Gateway Service, are provided within this framework (Fig. 3-13). Therefore, it is believed that economies of scope with respect to services provided by CAFIS are being generated through the shared use of equipment among services.

Fig. 3-13. Key services provided through CAFIS

Data communication service	Examples of key services
Credit card service	<ul style="list-style-type: none"> • Payment processing service for credit cards • Data transmission service pertaining to caching
Fund transfer service	<ul style="list-style-type: none"> • Debit card payment processing service • Data transmission service pertaining to the use of ATMs • Data transmission service pertaining to account transfers

Source: Produced by the Japan Fair Trade Commission based on an interview held with NTT Data

Generally speaking, it is known in such network-type industries as the telecommunications sector that the more subscribers a network has, the more there are opportunities for using the network, which in turn means that the value of the network itself will rise (network externalities)²³. To illustrate in connection with CAFIS, it is conceivable that account transfers become more convenient for nonbank code payment providers when the number of banks through which a CAFIS-based account transfer service can be used increases to give rise to a greater number of banks to which connections can be established through CAFIS.

On this point, respondents in interviews held with nonbank code payment providers and banks indicated a belief that CAFIS delivers stronger network externalities than other networks or Read/Write APIs do.

[Examples of interviews held with nonbank code payment providers]

- *There have been recent moves to utilize a different network rather than CAFIS. While the spread of this effort could function as pressure to reduce connection costs, the paucity of member banks is preventing use of this network from gaining ground.*
- *Even if we were to use a Read/Write API as a method for connecting to banks, the adoption of different API specifications by each bank will cause system development costs for meeting these specifications to be incurred. For this reason, we rely on a retail payment infrastructure provider.*

[Examples of interviews held with banks]

- *While we have also prepared a connection method based on the use of a Read/Write API, it is important to identify the means by which our business partners would like to establish a*

²³ Japan Fair Trade Commission, Ministry of Public Management, Home Affairs, Posts and Telecommunications, *Guidelines for Promoting Competition in the Telecommunications Sector*.

connection when it comes to connection services that we provide. Since specifications for Read/Write APIs differ a little from bank to bank, connecting to us through the use of a Read/Write API will mean that you would be giving up the advantage that connecting with CAFIS offers in terms of an ability to connect to many business partners. It is for this reason that we believe that nonbank code payment providers tend to refrain from choosing to connect with a Read/Write API.

- Since there is no platform at present to facilitate connections to all banks with the use of Read/Write APIs, a method that could enable connections to be made to all banks collectively through CAFIS might be advantageous to nonbank code payment providers when it comes to connecting to banks.*

In general, it is believed that the construction of a retail payment infrastructure would incur huge fixed costs, such that the concept of economies of scale would apply to a retail payment infrastructure in that the greater the volume of transactions that are carried out, the more average costs will decline, as we have seen in other industrial sectors in which equipment and systems requiring huge upfront investments are used.

D. CAFIS usage fees

When it comes to CAFIS usage fees, a schedule of fees known as the *schedule of listed fees* found in the Terms and Conditions of the Agreement as produced by NTT Data sets forth a fee for each provided service and metered fees for which a volume discount that is offered in accordance with the volume of data processing is taken into account. The levels of these fees are not subject to statutory regulations but have instead been set by NTT Data at its own discretion.

Metered fees tied to the volume of data processing as listed in the schedule of listed fees have not undergone a review for either credit card services or fund transfer services since 2007.

In a questionnaire administered to and interview held with NTT Data, the state of the operating profit on sales²⁴ for CAFIS services in general was confirmed to be most recently in the range of ten to twenty percent.

In interviews held with banks, many banks wondered why metered fees for CAFIS, which is used as a connection means for undertaking account charging and other transactions from bank accounts, have not been reviewed in a long time despite the fact that transaction volumes have increased for both the Instant Payment Gateway Service

²⁴ Ratio of operating profit, equal to sales less the cost of sales and selling, general, and administrative expenses, to sales.

and CAFIS services.

[Examples of interviews held with banks]

- *CAFIS usage fees are determined with a schedule of fees in the Terms and Conditions and there is essentially no recognition of any possibility of reducing fees. NTT Data has told us that “no changes can be made since these transactions are set forth in the Terms and Conditions”. Metered fees as provided for in the Terms and Conditions have not been revised for at least the last ten years.*
- *NTT Data has told us that, since the same conditions governing CAFIS usage fees apply to all banks, their policy is that they will not entertain negotiations to reduce costs even if negotiations on fees were to be conducted. The schedule of fees has not been revised ever since negotiations for the commencement of CAFIS utilization were conducted. We don’t understand why metered fees as provided for in the Terms and Conditions are not revised even though the volume of transactions through CAFIS itself is increasing.*

On the other hand, in an interview held with NTT Data, it was indicated that capital investments are on the rise in order to facilitate the provision of institutional support, security-related support, and support for the diversification of payment means and that, while contractually stipulated metered fees have not been reviewed, there are cases in which transactions are being undertaken with certain CAFIS-utilizing client companies for whom volumes of data processing is large at fees that are lower than the contractually stipulated metered fees as a result of separate negotiations on a case-by-case basis.

[Contents of an interview held with NTT Data]

- *With respect to costs concerning CAFIS, additional capital investments undertaken to ensure compliance with legal systems and with regulations adopted by different credit card companies are growing from year to year. Consequently, the cost of sales corresponding to depreciation is mounting and putting downward pressure on operating income.*
- *While it is a fact that metered fees tied to the volume of data processing as set forth in the schedule of listed fees of the CAFIS Terms and Conditions have not been revised in a long time, we have demonstrated flexibility, such as by setting up a separate framework of fees with clients for whom volumes of data processing is large. On the other hand, in light of the greater sophistication of needs with respect to cashless payments and a diversification of payment means in recent years, we will proactively upgrade with a view to expanding the cashless payment market and look into the possibility of reviewing CAFIS usage fees.*

2. Deposit transfer

(1) Outline of deposit transfer

A nonbank code payment provider disburses sales proceeds into the bank account of a member merchant by submitting a deposit transfer request to an intermediate bank (Fig. 2-7). If the member merchant has an account with the intermediate bank to which the request was submitted by the nonbank code payment provider, the disbursement of sales proceeds will be fulfilled when the bank moves funds between the accounts of the nonbank code payment provider and the member merchant (hereinafter referred to as “intrabank deposit transfers”).

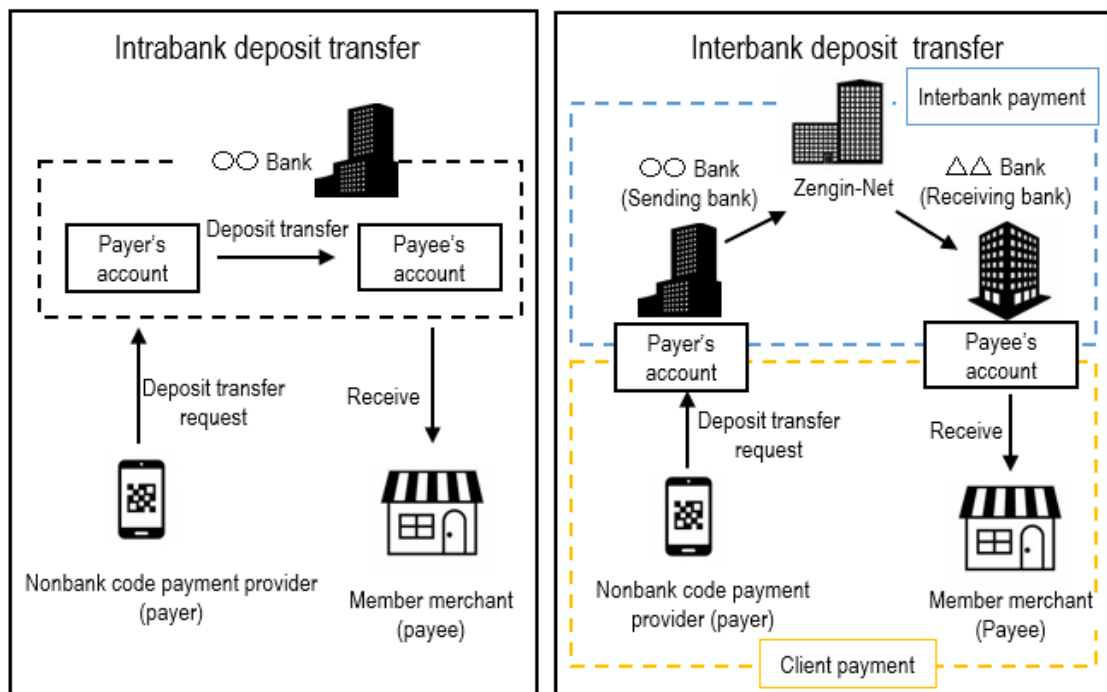
On the other hand, if a member merchant has an account with a bank that is different from the intermediate bank to which a deposit transfer request was submitted by a nonbank code payment provider, funds will need to be transferred between the intermediate bank to which the request was submitted by the nonbank code payment provider and the member merchant’s bank (hereinafter referred to as “interbank deposit transfer”; the bank that sends funds in an interbank deposit transfer shall be referred to as the “sending bank” and the bank that receives funds shall be referred to as the “receiving bank”). Where an interbank deposit transfer is to be undertaken, funds shall be moved between the sending bank and nonbank code payment provider and between the receiving bank and the member merchant and a payment of funds shall be undertaken 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 deposit transfers for carrying out interbank deposit transfers, the Domestic Funds Transfer System operated by the Japanese Banks’ Payment Clearing Network (hereinafter referred to as “Zengin-Net”) is utilized as the fund payment system. In addition, a national banking data communications system operated by Zengin-Net (hereinafter referred to as the “Zengin System”) is utilized as an interbank network system for operating the aforementioned fund payment system.

Based on the foregoing, differences between intrabank deposit transfers and interbank deposit transfers are as outlined in Fig. 3-14.

Fig. 3-14. Differences between intrabank deposit transfers and interbank deposit transfers



(2) Features of deposit transfer

Since the Domestic Funds Transfer System can be used by domestic financial institutions belonging to Zengin-Net and harnessed for interbank deposit transfers involving affiliated financial institutions, it will likely become more convenient as a fund payment system by increasing the number of remittees in the event that the number of affiliated financial institutions rises (network externalities). In a questionnaire administered to banks, 96.8 percent of banks adopting the Domestic Funds Transfer System cited the high number of connected financial institutions as a reason for adoption.

The construction of the Zengin System that is used for interbank payment processes has incurred fixed costs of tens of billions of yen. As we have seen in other industrial sectors in which equipment and systems requiring huge upfront investments are used, it seems that the concept of economies of scale would also apply to the Domestic Funds Transfer System in that the greater the volume of transactions are carried out, the more average costs will decline.

Upon estimating average costs arrived at by dividing total expenses incurred by the Zengin System by the number of transactions during the operating period in question, we verified that the cost per transaction will amount to several yen.

In general, it is possible to use, in addition to a method entailing the use of the Domestic Funds Transfer System, a clearing house system used in the clearance of cheques or business operators providing remittance services between certain banks in order to carry out interbank deposit transfers. On the other hand, since network externalities and economies of scale apply to interbank payments accompanying interbank deposit transfers, the option of remitting based on the use of the Zengin System is easier to select given considerations of comprehensiveness and efficiency and could naturally develop monopolistic tendencies (natural monopoly) in interbank deposit transfers. Most interbank deposit transfers in the country are in fact undertaken through the Domestic Funds Transfer System²⁵.

Identical opinions on this point were given in interviews held with banks.

[Examples of interviews held with banks]

- *In the case of a fund payment system with few member banks, there will be many banks that cannot remit funds through this system even if a deposit transfer request is received, which means that such a system cannot be regarded as a fund payment system capable of replacing the Zengin System. A system with many participating banks could conceivably be a fund payment system that could replace the Zengin System.*
- *If the Zengin System were to be replaced as a fund payment system, it would be undesirable if we cannot secure remittees nationwide. For this reason, we consider that the use of the Zengin System at this time is rational in light of the number of participants and the ability to strike a proper balance in terms of the time and costs incurred for payment procedures.*

Therefore, it seemed that carrying out a deposit transfer by way of the use of the Zengin System at the time a nonbank code payment provider disburses proceeds to a member merchant through an interbank deposit transfer is, for all intents and purposes, essential.

Moreover, deposit transfer service fees presented by a bank when a nonbank code payment provider submits a request for a deposit transfer to the bank are essentially set by each bank based on its own business judgment. However, as mentioned above, remittances undertaken using the Zengin System reflect monopolistic tendencies. Since market mechanisms are impeded somewhat in any business field in which a system with such traits and its operator play a role in the flow of transactions, it is possible that rigidly defined pricing is likely to be maintained for costs pertaining to deposit transfers if we were

²⁵ The number of times the cheque clearance system was used in 2018 (51.37 million) equaled no more than approximately 3.2 percent of the number of times the Domestic Funds Transfer System was used (1.61 billion). (Source: *Annual Report on Settlement Statistics for Fiscal Year 2018*, Japanese Bankers Association)

to simply take a laissez-faire attitude concerning free transactions carried out between parties engaging in transactions with one another.

On this point, nonbank code payment providers indicated in interviews that they believe that the burden of paying deposit transfer service fees for undertaking disbursements to member merchants is increasing and that they cannot get banks to agree in negotiations to reduce deposit transfer service fees below a certain level.

[Examples of interviews held with nonbank code payment providers]

- *A current management issue is the cost of deposit transfers. As we have set the frequency with which disbursements are made to member merchants to a relatively high level and as we deal with many local member merchants whose main banks are local banks, we often utilize interbank deposit transfers based on the use of the Zengin System when we make disbursements. Since small amounts are deposited frequently into member merchants' accounts, the more member merchants increase in number, the greater the number of times funds will be deposit transferred and the more deposit transfer costs will continue to rise. Even if we receive a request to increase the frequency of disbursements by member merchants in the future, it is hard to accept it given the deposit transfer costs that would be incurred.*
- *It makes sense that the ability to have funds disbursed at any time would be desirable for member merchants' cashflow situation but, for us, increasing the frequency of disbursements would increase the rate at which disbursements consisting of smaller sums per disbursement are made and cause deposit transfer costs incurred by us to go up. These potential consequences impede the adoption of this idea on our part.*
- *Costs incurred for disbursements involving a mega-bank are around 100-150 yen for interbank deposit transfers of less than 30,000 yen and around 150-200 yen for interbank deposit transfers of 30,000 yen or more. We've heard that these service fee levels cannot be lowered any further given that there are service fees to be paid by the sending bank to the receiving bank and fees incurred for the use of the Zengin System.*

As stated in 2 (2) B (C) of Chapter 2 above, due to the fact that costs are essentially not incurred when sales proceeds are disbursed for a member merchant as part of a code payment service undertaken by a bank²⁶. Therefore, it can be said competitive conditions pertaining to disbursements differ to a certain extent between banks and nonbank code

²⁶ Even where code payment services are provided by a bank, a disbursement may in some cases be made to a member merchant with an account with a bank that differs from the bank providing code payment services. However, costs are for the most part not incurred in interbank payments since a form of settling funds on an interbank basis known as a miscellaneous exchange is used to harness the Zengin System in many cases where an interbank payment is undertaken for the disbursement of proceeds to a member merchant.

payment providers.

(3) Cost structure of deposit transfer

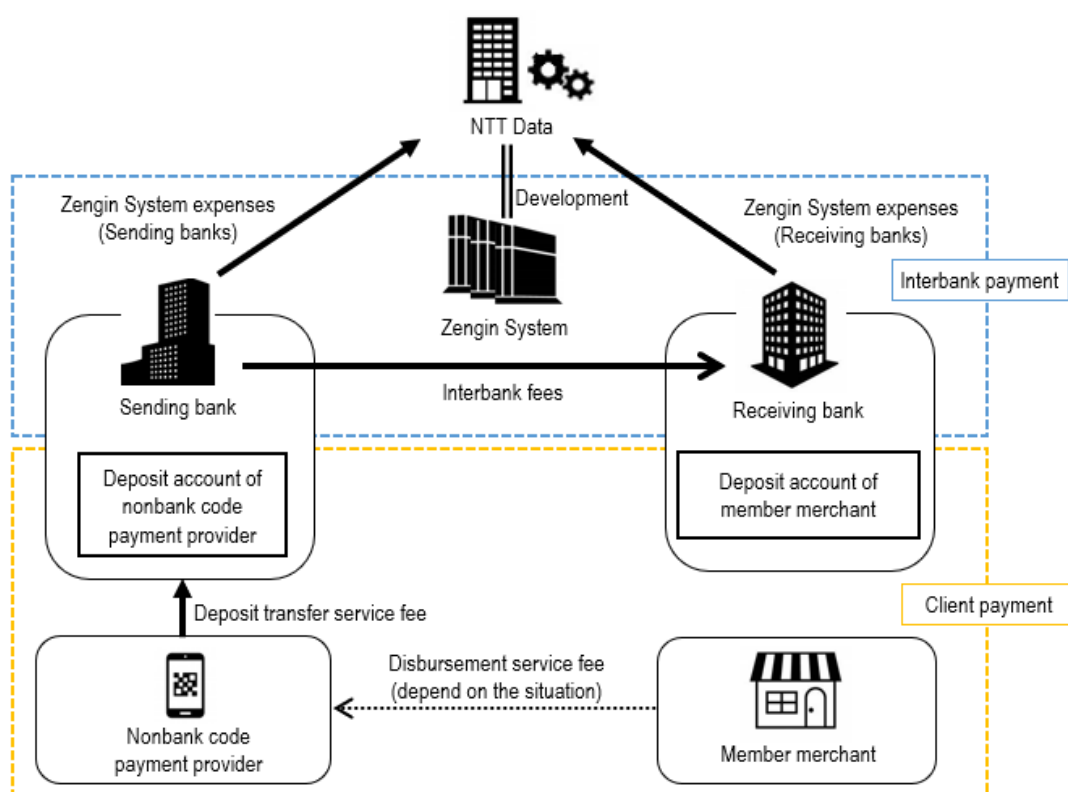
As outlined in Fig. 3-15, there are interbank service fees per deposit transfer paid by the sending bank to the receiving bank and Zengin System expenses²⁷ paid by a sending bank and receiving bank to cover Zengin System's construction, operating, and maintenance costs, as costs incurred whenever an interbank deposit transfer is undertaken.

Zengin System expenses are expenses that are incurred for developing and operating the Zengin System; these expenses are jointly assumed by banks according to a prescribed rate determined in accordance with the number of transactions that are processed and other variables and are paid to NTT Data, the system vendor of the Zengin System. While these expenses vary from bank to bank, the sum of expenses assumed by a sending bank and expenses assumed by a receiving bank per transaction is conceivably around several yen on average as stated in (2) above.

For this survey, an investigation was conducted with a focus on interbank fees paid by sending banks to receiving banks.

²⁷ In addition to Zengin System costs, expenses that are incurred when the Zengin System is used include Zengin Center operating costs, which are incurred for the operations of Zengin-Net, and costs billed by the Bank of Japan; these other expenses, however, are not addressed in this report.

Fig. 3-15. Expenses and service fees incurred per deposit transfer



A. Levels of interbank fees and status of negotiations

According to interviews held with Zengin-Net and banks, during the period from April 1973, when the Zengin System first began operation, through December 1977, the levels of interbank fees were in the amounts indicated in the notice sent to member banks by Zengin-Net's predecessor, the Organization for Management of Domestic Fund Transfers. However, after December 1977, when the Organization for Management of Domestic Fund Transfers abolished notices on interbank fees, the Domestic Fund Transfer Handling Rules established by Zengin-Net and the Organization for Management of Domestic Fund Transfers stipulated that interbank fees would be decided through mutual negotiations among banks. In practical terms, they negotiate interbank fees in the form of one bank notifying another of the interbank fees and the other bank approving them.

While today interbank fees are to be determined through mutual negotiations between banks, the interbank fees set by all banks that responded to questionnaire administered to banks were 117 yen (tax excluded) for deposit transfers of less than 30,000 yen and 162 yen (tax excluded) for deposit transfers of 30,000 yen or more. In addition, it could not be confirmed through interviews held with banks that there were any cases of the use

of interbank fees at levels other than the current ones since, at the latest, February 1979, or of any of the banks negotiating to change levels of interbank fees.

When the questionnaire administered to banks asked about banks' understandings of the method of determining interbank fees, approximately thirty percent of banks responded that they used the amounts provided by Zengin-Net and others²⁸ (Fig. 3-16).

Fig. 3-16. How to decide the amounts of interbank fees?

	Banks
Fees are determined through mutual negotiation with each counterparty bank	47 (36.4%)
We use amounts which is customarily employed	38 (29.5%)
We use amounts provided by Zengin-Net and others	37 (28.7%)
Others	4 (3.1%)
No answer	3 (2.3%)
Number of answers	129

Source: Results of a questionnaire administered to banks

Interviews held with the banks indicated that "Fees are determined through mutual negotiation with each counterparty bank" and "Amounts customarily employed are used" showed that these banks, too, did not actually negotiate for the interbank fees but instead simply used the levels of which they had been notified in the past by the Organization for Management of Domestic Fund Transfers. In addition, interviews held with banks that had entered the banking industry since 1973 showed that they effectively set interbank fees at the prescribed levels.

[Examples from interviews held with banks]

- For interbank fees, we use the same amounts as those provided by the Organization for Management of Domestic Fund Transfers in the past. We have never considered the reasons for not negotiating with other banks for the levels of interbank fees or the appropriateness of those levels.
- Questionnaire about interbank fees, we responded "We use amounts which is customarily employed".,this means that the amounts of interbank fees have not changed since they were

²⁸ According to interviews with Zengin-Net, it has not been involved in decisions on interbank fees by individual banks since December 1977. This study has been unable to confirm any cases of Zengin-Net or its predecessor, the Organization for Management of Domestic Fund Transfers, having indicated the levels of interbank fees or rough targets for such levels during the period since December 1977.

decided. We have never considered whether the levels of interbank fees were appropriate. Though we have decided on interbank fees with new banks joining the Zengin System, these were set to the same after all.

- While we do conclude contracts with individual banks on interbank fees, as the results of mutual negotiation to determine such fees, in fact we have never considered what expenses would arise or what levels would be appropriate. When we entered the banking industry as well, our understanding was that we would join the industry using the effectively predetermined amounts.

B. Level of expenses borne by the receiving bank in deposit transfer

While no definite answers were received from interviews held with banks regarding the kinds of grounds on which the necessity for payment of interbank fees arose, interbank fees can be considered to represent the price of entrustment to the receiving bank by the sending bank that received the deposit transfer request from the code payment provider or other payer of administration of crediting the amount of the deposit transfer to the deposit account of the member merchant or other recipient.

In response to a questionnaire administered to and interviews held with banks concerning the costs which the receiving banks bear in a deposit transfer, they described that they bore such costs as shown in Fig. 3-17.

Fig. 3-17. Examples of costs borne by the receiving bank in a deposit transfer

(i) Costs of infrastructure usage	<ul style="list-style-type: none"> • Zengin System expenses (receiving bank's portion) • Integrated ATM switching service²⁹ usage charges etc.
(ii) Costs of bank computer systems	<ul style="list-style-type: none"> • Backbone system usage/amortization costs • Anti-money-laundering (AML) software costs etc.
(iii) Back-office administration costs	<ul style="list-style-type: none"> • Receiving administration costs • Anti-money-laundering (AML) section costs, etc.

Source: Results of a questionnaire administered to banks

When we asked multiple banks to estimate the level of costs borne by the receiving bank per deposit transfer based on the costs under (i) through (iii) in Fig. 3-17, they answered that most such costs consisted of category (ii), costs of bank computer systems, that the level of such costs was uniform regardless of the amount of the deposit transfer, and that even at their highest such costs were less than one-half the current level of

²⁹ This is a service provided by NTT DATA to relay transaction messages between financial institutions' cash dispensers (CDs) and automated teller machines (ATMs). It also is used in transfers for interbank deposit transfer as a means of checking the recipient's account.

interbank fees.

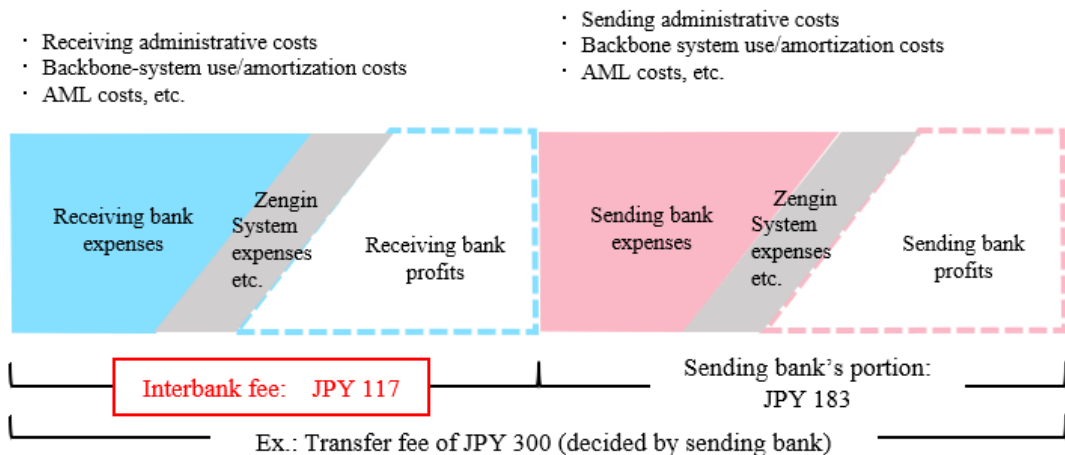
In addition, the following views concerning levels of interbank fees were identified in interviews held with banks.

[Examples from interviews held with banks]

- We are not sure why interbank fees arise. At the very least, we have never included costs as high as 100 yen when receiving a deposit transfer as the receiving bank.
- To be honest, we believe that the interbank fees are too high compared to the costs arising in exchange operations. While it is a fact that in the past the costs of administration by the receiving bank, such as labor costs, were high due to the high level of paperwork involved, surely no banker would believe that it was appropriate for the levels of interbank fees to have remained unchanged for nearly half a century even as deposit transfer costs per transaction clearly must have decreased with the automation of exchange operations.
- Since deposit transfers within the bank and transfer notifications sent via the Zengin System largely are processed automatically using computer systems, their cost is nearly zero yen. The amounts of deposit transfer fees include operation costs and profit margins in addition to these costs. Since ultimately costs, such as interbank fees and Zengin System expenses, arising when using the Zengin System are passed on to the customer, as a user of the system, we would like the costs to be reduced if possible.

Based on the points discussed under A and B above, the cost structure of interbank deposit transfer fees, assuming a fee of 300 yen, can be outlined as shown in Fig. 3-18.

Fig. 3-18. Cost structure of interbank deposit transfer fees (for a deposit transfer of less than 30,000 yen submitted using an Internet banking service)



C. Effects of the fact that interbank fees effectively are fixed

Since, as noted under A above, the levels of interbank fees have remained fixed for many years, competition in deposit transfer fees for interbank deposit transfers and intrabank deposit transfers can be considered to have had the following effects.

(A) Effects on levels of deposit transfer fees for interbank deposit transfer

Interviews held with banks showed that while deposit transfer fees are based on the management decisions of individual banks, interbank fees, which are costs arising in interbank payment, are considered to be one amount corresponding to the cost of transfer fees. Some banks said that if levels of interbank fees were lower, then levels of deposit transfer fees could be lowered as well.

[Examples from interviews held with banks]

- If the levels of interbank fees were to decrease, then there also would be room for lowering the fees we charge customers. We do not deny that the fact that interbank fees are fixed affects the pricing of charges for deposit transfer services.
- It is true that in setting the amounts of deposit transfer fees we add in interbank fees as a cost.
- We believe that the levels of interbank fees do affect the setting of deposit transfer fees. Deposit transfer fees are decided with consideration for various costs in addition to interbank fees. We believe that if interbank fees were to be eliminated, then deposit transfer fees would decrease by the same amount.

In addition, some banks employ measures, such as providing up to a certain number of deposit transfers free of charge to corporate or individual customers who satisfied certain criteria or setting deposit transfer fees to levels even lower than interbank fees. These interviews held with banks also showed that some were of the view that while offering deposit transfer fees even lower than interbank fees in this way made it easier for a bank to be chosen by customers as the sending bank to which it would request deposit transfers, it also led to an increase in the burden of interbank fees paid by the sending bank to the receiving bank, and this could force it to consider increasing deposit transfer fees.

[Examples from interviews held with banks]

- Since we offer up to a certain number of deposit transfers free of charge or at reduced deposit transfer fees, we tend to be chosen as the sending bank, and we tend to run a deficit in our

balance of interbank fees. While lower deposit transfer fees lead to increased use of deposit transfers by customers, the increase in deposit transfers leads to a steady increase in our payment of interbank fees. Since losses on interbank fees are an issue for management, if these losses were to continue increasing in the future, we would be forced either to increase the deposit transfer fees we collect from customers or to reduce the numbers of free deposit transfers we provide.

(B) Refusing use of intrabank deposit transfers

When the account of a nonbank code payment provider and that of the member merchant are with the same bank, use of deposit transfers through intrabank deposit transfers could make it possible to disburse sales proceeds to member merchant at lower charges than through interbank deposit transfers via the Zengin System.

At the same time, in interviews held with some nonbank code payment providers, they replied that banks did not permit them to disburse sales proceeds into the bank account of a member merchant using intrabank deposit transfers, citing as a reason the interbank fees that they could receive as the receiving bank when transferring funds through interbank deposit transfers.

[Examples from interviews held with nonbank code payment providers]

- About ninety percent of the funds we disburse to member merchants are transferred through the Zengin System. To reduce disbursing costs, we once asked a bank with which we have a corporate account whether it would be possible to deposit transfer funds within the bank instead of through the Zengin System. However, the bank rejected this proposal on the grounds that it would earn more from the interbank transfer fees than it could from intrabank transfer.
- Since we have heard that when deposit transferring funds between banks via the Zengin System fees must be paid to the receiving bank, we are negotiating with banks with which numerous member merchants have accounts on the transfer of funds using intrabank deposit transfers. However, even in such negotiations on intrabank deposit transfer fees, ultimately the transfer fees proposed often are even higher than for interbank deposit transfers offered by the mega-bank, so that the use of intrabank deposit transfers is not necessarily realized.

(4) Governance, membership conditions

A. Governance structure

As described above under (2) and (3) C (A), interbank fees and the other costs of using the Domestic Funds Transfer System are passed along as a part of the cost of deposit transfer fees paid by nonbank code payment providers or other parties.

Although in using interbank deposit transfers, a nonbank code payment provider could negotiate with banks on deposit transfer fees, and it could be considered difficult to demand improvements in such negotiations in light of the cost structure that arises for interbank payment.

In interviews held with banks, the view was expressed that since the Domestic Funds Transfer System is a fund payment system used jointly by banks, realistically, it would be difficult to propose a system based on the awareness of the issues of individual banks in light of adjustment costs. This can be considered a result of the fact that since this fund payment system is used jointly by multiple banks, it is difficult to create incentives for individual banks to improve the efficiency of the fund payment system (i.e., it involves issues of collective action).

In response to concerns about convenience and efficiency among users conducting deposit transfers via Zengin-Net,³⁰ they have established the Zengin-Net Advisory Committee as a body to collect information on the needs of consumers and general businesses regarding domestic fund transfer transactions and fund payment system and to put it to use in organizational management.

On the other hand, in interviews held with experts, the view was expressed that since the Zengin-Net Advisory Committee meets for only about two hours once a year, it is not necessarily functioning as a venue for sufficient discussions concerning a resolution of the issues with the Zengin System and improvements in efficiency.

B. Transparency

While banks, as participants in interbank payment, do ascertain the costs that impact fees per deposit transfer, such as Zengin System procurement costs and interbank fees, they do not disclose such information to consumers, general businesses, or other stakeholders.

On this point, the fund payment system of the United States, Great Britain, Australia, France, and other countries disclose and estimate the costs of use of their systems per transaction (Fig. 3-19). In addition, investigation of whether they charge any fees that correspond to Japan's interbank fees, based on published data and interviews held with businesses and experts, was unable to identify the presence of any such fees.

³⁰ Similar concerns have been identified in documents, such as Subcommittee II, Finance Department, Financial System Council (2009), "Development of a system for funds payment."

Fig. 3-19. Usage charges for fund payment system in various other countries

Country (Fund payment system)	Fund payment system usage charge per transaction	Are there any fees correspond to interbank fees?
United States ³¹ (Fed ACH)	USD 0.0035 (JPY 0.4)	No
United States ³² (TCH)	USD 0.045 (JPY 5)	No ³³
Great Britain ³⁴ (Faster Payments)	GBP 0.027 (JPY 3.5)	No
Australia ³⁵ (New Payment Platform)	AUD 0.39 ^{*1} (JPY 26)	No
France ³⁶ (STET CORE(FR))	EUR 0.003-0.004 (JPY 0.4-0.5)	No

*1 Fund payment system usage charges in Australia are estimated provisionally to a level at which the balance of ordinary expenses would be equal, based on current levels of transactions. Actual charges applied are lower.

*2 The exchange rates used in the table above are USD 1 = JPY 110, EUR 1 = JPY 120, GBP 1 = JPY 130, and AUD 1 = JPY 65.

Source: Fund payment system usage charges are from published data; interbank fees is produced by the Fair Trade Commission based on published data and interviews held with businesses and experts.

C. Criteria for membership

Eligibility for membership in the Domestic Funds Transfer System is limited to two types of institutions: direct payment participants that handle final interbank payment using current account deposits with the Bank of Japan and financial institutions entrusting payment to agencies, which use the Zengin System indirectly without using current account deposits with the Bank of Japan themselves, by ultimately entrusting interbank payment to central cooperative institutions and other direct payment participants.³⁷ Since either of these requirements restricted eligibility for membership to deposit-taking

³¹ The Federal Reserve (2020), "FedComplete® Packages 2020 Fee Schedules"

³² The Clearing House (2019), "Simple, Transparent, Uniform Pricing for All Financial Institutions," The Clearing House (2020), "Real-Time Payments Operating Rules"

³³ In the case of a payment request, in which the receiving bank demands payment from the sending bank, USD 0.1 (JPY 11) is paid from the receiving bank to the sending bank.

³⁴ Faster Payments (2018), "Service Principles"

³⁵ Australian Competition and Consumer Commission and Reserve Bank of Australia (2000), "Debit and credit card schemes in Australia - a study of interchange fees and access," NPP Australia limited (2019), "Annual Report 2019"

³⁶ STET (2019), "Grille Tarifaire CORE(FR) applicable à compter du 1er janvier 2019,"

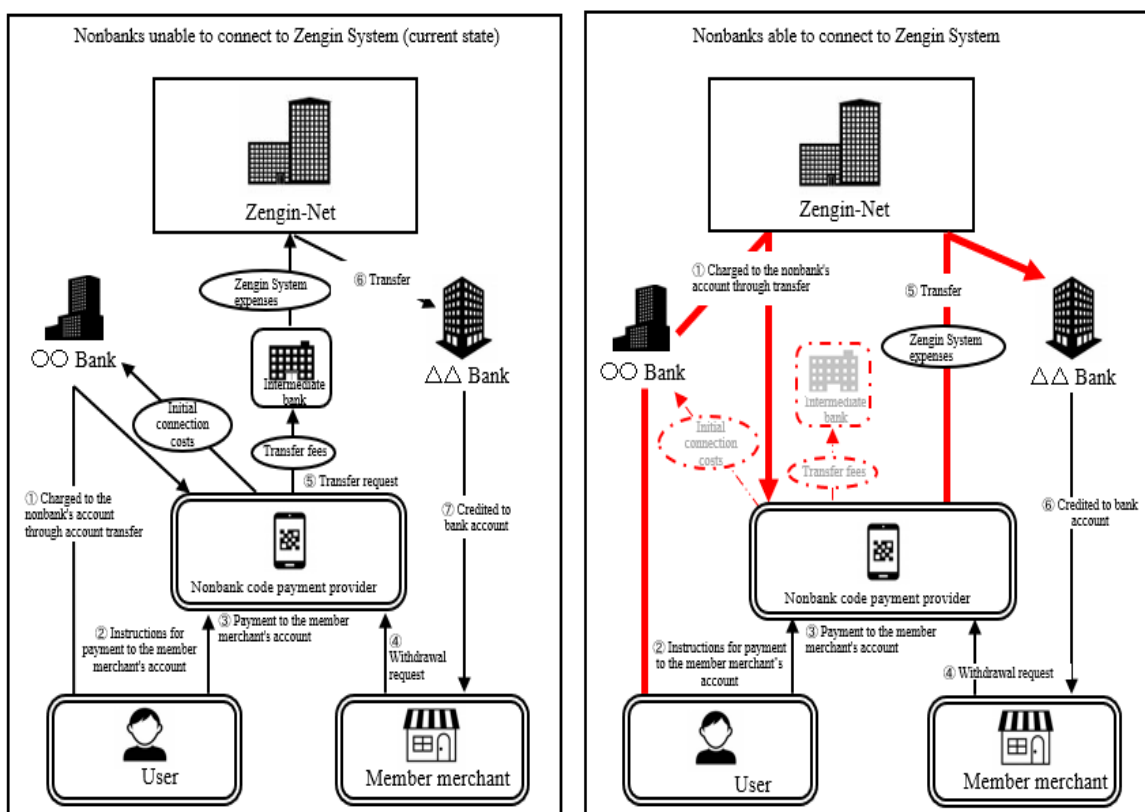
Autorité de la concurrence (2012), "Décision 12-D-17 du 05 juillet 2012"

³⁷ In addition to cooperative financial institutions, there also are cases in which businesses authorized to engage in the banking business have joined Zengin-Net through entrustment of interbank payment to other banks as their agents without opening current account deposits with the Bank of Japan.

financial institutions engaging in the domestic fund transfer business as banks or similar institutions,³⁸ fund transfer service providers including nonbank code payment providers, which are able to engage in exchange transactions similar to those of banks in amounts up to 1 million yen, are not authorized to become members.

For this reason, nonbank code payment providers or other parties cannot connect to the Zengin System directly; the flow for funds deposited by users involves the securing of funds through methods, such as account charging from bank accounts. This results in burdens such as negotiation costs and initial connection costs for connection with numerous banks. In addition, in the flow for funds disbursed to member merchants, it is conceivable that intermediary costs may arise through deposit transfer requests to intermediate banks. Fig. 3-20 shows examples of the costs that could be reduced if nonbank code payment provider were able to connect to the Zengin System directly.

Fig. 3-20. Examples of costs that would be reduced if nonbank code payment providers were able to connect to the Zengin System directly



³⁸ Zengin-Net, Operational Procedures, Article 7

International principles require fund payment system to establish and publish objective requirements for participation based on evaluation of risks to enable fair and open access,³⁹ In addition, Britain, India, Hong Kong, and Singapore provide nonbank payment businesses with opportunities to access fund payment system.

In a questionnaire administered to fund transfer service providers, there is some degree of demand for the use of fund payment system to enable transfers between such businesses and with banks with more than 65 percent of respondent businesses indicating that if it were possible to do so they would consider such use proactively (Fig. 3-21).

Fig. 3-21. If it were possible to use the fund payment system for transfers between fund transfer service provider and transfers between fund transfer service provider and banks, would you proactively consider using it?

Answer	Number of fund transfer service provider
Yes	29 (65.9%)
No	15 (34.1%)
Respondents	44

Source: Results of a questionnaire administered to fund transfer service providers

In a questionnaire administered to fund transfer service providers, the main reasons funds transfer service providers reported for consideration of use of the fund payment system were as shown below.

[Examples of answers from a questionnaire administered to fund transfer service providers]

- Since the burden on small and medium-sized fund transfer service providers of negotiation with individual banks and other institutions on connection is very heavy, we would like to pay close attention to whether or not we would be able to meet the conditions for use of the fund payment system.
- While it is essential to study carefully whether we would benefit from use of the fund payment system, since the necessary costs (of development, connection, and operation) are high, we believe that it could provide the following conveniences:
 - (i) Increased convenience to users because it would be possible to transfer funds directly between the accounts of fund transfer service provider and banks accounts, in both directions, without going through other bank accounts

³⁹ Bank for International Settlements, International Organization of Securities Commissions, "Principles for Financial Market Infrastructures"

(ii) Expected reductions in costs of transfers

- If businesses, such as fund transfer service provider, were able to use the funds payment system and charges for transfers between Zengin-Net participants were reduced, then we would expect charge costs to decrease.

Chapter 4: Consideration of cashless payment in light of competition policy and the AMA

Generally, stimulation of competition among banks and fintech companies in the financial sector is considered likely to contribute to developments, such as creation of new services, promotion of innovations that include cooperation with nonfinancial businesses, and providing a wider range of choices and greater convenience to users.

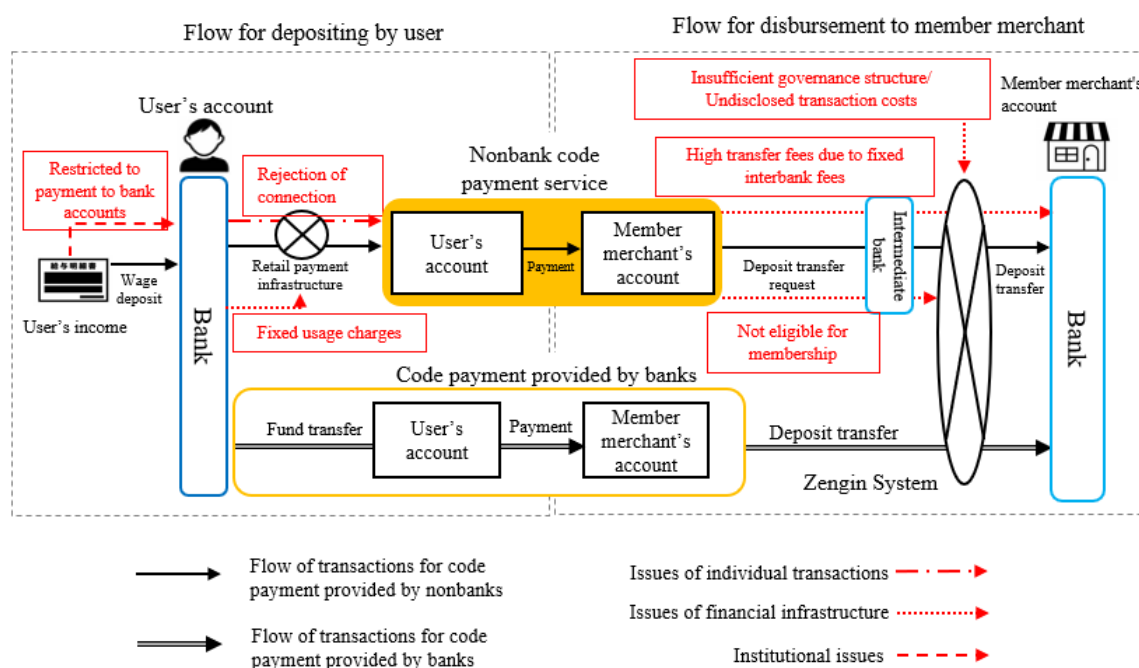
In the field of cashless payment, including code payment, participating fintech companies include nonbanks, chiefly fund transfer service provider, that provide payment services in small amounts used to pay for purchases such as everyday items. Since the market for cashless payment, including code payment, is expected to grow in the future as well, such low-amount, high-frequency payment transactions are likely to increase steadily in number. In addition, future progress in cashless payment could generate new value for users, member merchants, and other businesses with the growth of new types of businesses utilizing payment data.

At the same time, as noted above this survey has shown that in transactions related to deposits and withdrawals through cashless payment conducted by nonbank code payment providers, effectively it is essential to connect directly to the bank accounts of users and member merchants and that the financial infrastructure used has a transaction structure with the nature of a natural monopoly.

Maintenance of such a transaction structure leads to limitations on the improvements in convenience and other results that fintech companies can expect from new entry to cashless payment. It does so by increasing costs to nonbank code payment providers and providing competitive advantages to banks.

As shown in Fig. 4-1, this survey identified the following types of issues in transactions related to deposits and withdrawals in code payment: issues related to individual transactions, issues related to financial infrastructure, and systemic issues.

Fig. 4-1. Issues in code payment in light of competition policy and the AMA



Thinking on these issues in light of competition policy and the AMA is outlined below.

1. Issues of transactions between banks and nonbank code payment providers

Basically, businesses are free to choose with whom they transact business for products and services and the kinds of conditions under which they engage in such transactions.

At the same time, as noted above under Chapter 3, 1 (1), the transaction relations between banks and nonbank code payment providers providing code payment take the following two forms:

- (i) Vertical (upstream/downstream) transaction relations in which nonbank code payment providers must connect to users' bank accounts in order to secure sources of funds for payment
- (ii) Horizontal transaction relations in transactions with users and with member merchants

In addition, as noted above under Chapter 3, 1 (2) E, in light of the possibility of cases in which difficulty in continuing transactions with banks could present a major impediment to the business operations of nonbank code payment providers, banks could have advantageous positions vis-a-vis nonbank code payment providers in account charging and other transactions.

Thinking on the actual state of account charging and other transactions between banks and nonbank code payment providers, as seen above under Chapter 3, 1 (3) in light of such transaction relationships is outlined below.

(1) Rejection of transactions

Basically, businesses are free to choose the other businesses with which they engage in transactions. In general no issues under the AMA would arise if a business were to decide, based on its own individual judgment, not to transact with another business in consideration of price, quality, service, or other factors.

However, if an influential enterprise in an upstream market were to reject transactions as a means of achieving purposes that are improper under the AMA, such as exclusion of a competitor from a downstream market or impeding a competitor's business activities, and as a result of such rejection, the victim might be unable to carry out its normal business activities, or the upstream business were improperly to impede transactions by a competitor and its trading partners through means of raising the prices of products and services provided to an extent that effectively would be equivalent to a refusal to engage in transactions, then it causes the legal issues with the AMA (as primary refusals to deal by a single enterprise or interference with a competitor's transaction). In addition, it also causes the legal issues with the AMA if an influential enterprise in a market were to discriminate improperly in the areas of the prices of identical services or other transaction conditions (as discriminatory pricing or discriminatory treatment).

With regard to account charging and other transactions, cases have been observed of banks requiring code payment providers to negotiate not with the sales staff in charge of transactions with corporate customers but with the sections in charge of code payment, which effectively are in relations of competition with such businesses, offering transaction conditions that would be extremely difficult for nonbank code payment providers to accept, not offering conditions for connection because the payment services provided by nonbank code payment providers would compete with the banks' exchange transactions, or proposing fees that are clearly much higher than the code payment providers' profits.

There is a possibility that acts by banks that themselves provide code payment and have powerful positions in upstream markets (when the banks provide the code payment providers with connection services related to actions such as account charging from bank accounts) of refusing charging and other transactions with the nonbank code payment providers for purposes of eliminating them from the market as competitors or of raising the fees charged nonbank code payment providers for connection to bank accounts to a degree that effectively would be the same as refusing transactions, which could cause the legal issues with the AMA. In addition, acts by a bank with a powerful position in upstream markets of improper discriminatory treatment related to the conditions or implementation of account charging and other transactions, regardless of whether or not the bank itself

provides code payment, also could cause the legal issues with the AMA.

(2) Demands for price increases

As noted above under Chapter 3, 1 (1), in account charging and other transactions, if a nonbank code payment provider is unable to secure a connection to the bank account to which the income serving as the source of funding of the payment means in code payment is transferred, then it could be difficult for it to provide code payment to the user that holds the bank account. Thus, conducting account charging and other transactions from bank accounts must be considered a highly important method of conducting such transactions from the point of view of nonbank code payment providers.

For this reason, if a bank that provides code payment engages in the acts of setting fees related to connection by nonbank code payment providers to bank accounts at levels higher than the member merchant service fees charged for its own code payment services, or sets prices at levels approaching ones at which nonbank code payment providers would not be able to compete through rational business activities, all with the objective of excluding competing nonbank code payment providers from the market, then that could cause the legal issues with the AMA (as private monopolization).

Interviews held with banks identified views such as those that it was necessary to demand increases in prices due to rising AML costs or to include in charges for account charging and other transactions amounts to help the banks compensate users in the event that a service of a nonbank code payment provider was used fraudulently.

On these points, in light of the view that conversion of AML costs to a per-transaction basis would not necessarily result in a high cost burden, and that ordinarily amounts of compensation of users should be determined in accordance with contractual liability for compensation, raising prices in order to incorporate into charges for account charging and other transactions anticipated amounts of compensation to users can be considered, effectively, to be an act of shifting liability for compensation to nonbank code payment providers, there is a possibility that this could be described as not necessarily reasonable grounds for price increases.

Generally, when transaction conditions and other matters are not negotiated sufficiently, transaction counterparties tend to see such conditions as having been decided unilaterally. For this reason, when a bank presents transaction conditions for account charging and other transactions to a nonbank code payment provider, it would be desirable from the perspective of competition policy for it to explain fully to the nonbank code payment provider the reasons for presenting such conditions.

- (3) Demands for development of member merchants, covering promotional costs, providing payment data, etc.

In general, when a business is in an advantageous position over the other party to a transaction demands from the other party (i) provision of services on its behalf or (ii) bearing of monetary costs under names, such as approval fees, so that the counterparty is demanded to provide economic benefits that would constitute an unreasonable burden in consideration of its direct profits from the transaction, and the counterparty is forced to accept such demands in consideration of the impact on its future transactions, such demands would unjustly, in light of normal business practices, impose a disadvantage on the counterparty, and it could cause the legal issues with the AMA (abuse of superior bargaining position).

In addition, the act of one party recognized to be in a superior bargaining position in a transaction of demanding unilaterally that the other party provide data in its possession could, depending on the details and conditions thereof, unjustly impose a disadvantage on the counterparty, and qualify as abuse of superior bargaining position.⁴⁰

As noted above under Chapter 3, 1 (2) E, in account charging and other transactions nonbank code payment providers face a high degree of necessity to transact with banks, and if continuation of transactions with banks were to become difficult, then they could be faced with serious impediments to their business operations. For this reason, banks could in fact be in superior bargaining positions in their transactions with nonbank code payment providers.

It could cause the legal issues with the AMA (abuse of superior bargaining position) if a bank in an advantageous position compared to a nonbank code payment provider in a transaction were to force the nonbank code payment provider to develop member merchants in a way that would benefit only code payment provided by the bank, to demand that it bear promotional costs that would not directly benefit the nonbank code payment provider, or to force it to provide its payment data unilaterally if such acts unjustly, in light of normal business practices, impose a disadvantage on the counterparty.

2. Financial infrastructure issues

From the perspective of maintenance of a competitive environment, it would not be desirable for not only industry transaction practices but also structural elements such as the structures and systems behind them to impede the business activities of new entrants. This is because such as case would limit the anticipated effects of new entrants in promoting

⁴⁰ Competition Policy Research Center, Japan Fair Trade Commission, *Report of the Study Group on Data and Competition Policy*

competition—that is, the encouragement of innovation as well as increased choices and improved convenience for users.

Since their structures are ones under which it appears that their costs could be shifted to users through account charging and other transactions and through deposit transfers to member merchants, the two financial infrastructures covered by this survey (CAFIS and the Zengin System) can be considered in the following ways in terms of competition policy.

(1) Setting of CAFIS usage charges and usage of Read/Write APIs

As noted above under Chapter 3, 1 (4), CAFIS, as a retail payment infrastructure used for a bank to provide nonbank code payment providers with a means of connection for account charging and other transactions conducted from bank accounts, effectively is an essential infrastructure for implementing account charging-related transactions.

In addition, since as noted above under Chapter 3, 1 (4) C, among the services provided by CAFIS, funds transfer operation services, used in cases such as account charging from a bank account, involve economies of scope, network externalities, and economies of scale, it is conceivable that they could tend to make it more difficult for market mechanisms to function depending on how their usage charges were set.

In fact, even though as noted above under Chapter 3, 1 (4) B, the transaction volume of the CAFIS service as a whole as well as the transaction volume of the real-time payment gateway service used as a means of connection for account charging and other transactions from bank accounts both are increasing, so that costs per transaction are likely to be decreasing, it has been more than a decade since CAFIS' metered fees per data processing were revised last.

The rigidity of payment infrastructure charges, which effectively are indispensable to account charging and other transactions conducted from bank accounts, also could lead the costs related to such transactions to rise and by extension leading to high fee rates charged to member merchants, which is an issue affecting the spread of cashless payments. According to interviews held with NTT DATA, although there are examples of transactions in which CAFIS usage charges are lower than the metered fees shown in contracts concluded through individual negotiations, in 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.⁴¹

⁴¹ While this survey has considered chiefly funds transfer operational services, since transaction volumes are increasing steadily for credit card operational services as well, and metered fees per data processing for such services

In addition, in interviews held with nonbank code payment providers, the need was pointed out for duplication of investment since connection specifications in Read/Write APIs are not fully standardized among banks, due in large part to the fact that use of CAFIS effectively is essential to account charging and other transactions conducted from bank accounts.

For this reason, from the perspective of competition policy, 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, while also employing consideration for the cost burden necessary for the development of such Read/Write APIs, through standardization of the Read/Write APIs' connection specifications among banks and studying the development of a common infrastructure in which connection specifications are standardized.

(2) Points at issue concerning transactions conducted using the Zengin System

A. Review of transaction practices related to interbank fees

The Domestic Funds Transfer System used in interbank payment has the nature of a natural monopoly. At the same time, it is a fund payment system whose use is essential when conducting interbank deposit transfers. In addition, the cost structure that arises in interbank payment can be considered one in which the burden of stated deposit transfer fees is shifted to customers.

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.

As noted above under Chapter 3, 2 (3) C, maintenance of interbank fees at fixed levels in this manner is not only could serve as an impediment to reducing withdrawal costs of nonbank code payment providers and member merchants but also, by extension, could lead to circumstances detrimental to the convenience of member merchants by keeping down the frequency of withdrawals from cashless payment providers' accounts to those of member merchants.

On the other hand, in various other countries, there are not fees corresponding to interbank fees. This fact too would imply, from the perspective of competition policy, that

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.

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 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.

B. Enhancing the Zengin-Net governance structure and securing transparency

As noted above under Chapter 3, 2 (3) C (A), the current structure appears to be one under which transaction costs arising in interbank remittances, such as interbank fees, are shifted to the deposit transfer fees paid by end users, such as code payment providers, consumers, and general businesses. However, not only there are not incentives for banks to point out issues with the structure of costs of using the Domestic Funds Transfer System but there also is a lack of sufficient opportunities to reflect the needs of end users of interbank deposit transfer. For this reason, under current conditions it appears that it would be difficult to say that a governance system is in place that is adequate to help improve structural issues in costs of the Domestic Funds Transfer System.

In addition, while in other countries there are cases in which costs such as usage charges for fund payment system, which impact fees per deposit transfer, are made public, as noted above under Chapter 3, 2 (4) B, the Domestic Funds Transfer System does not disclose this cost structure to end users resulting in a lack of transparency. There is a possibility that this lack of transparency regarding transactions in the Domestic Funds Transfer System has resulted in limited opportunities for outsiders to demand improvements regarding the cost structure of the Domestic Funds Transfer System.

For this reason, from a competition-policy perspective, with regard to the cost structure of the Domestic Funds Transfer System, which has an essential natural monopoly, it 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 light of the fact that the structure affects the deposit transfer used by end users, and to secure transparency in transactions conducted using it.

C. Studies toward opening up access to fund payment system to funds transfer businesses

As noted above under Chapter 2, 1 (3) B, even though major nonbank code payment providers do, through registration as funds transfer service providers either themselves or by their subsidiaries, conduct exchange transactions similar to those of banks, they are not permitted to join the Domestic Funds Transfer System.

For this reason, in providing code payment nonbank code payment providers incur

costs such as the following:

- (i) Costs of negotiation with multiple banks on connection, in order to provide methods of conducting transactions such as account charging from bank accounts, in the flow for depositing of funds by users
- (ii) Intermediate costs of deposit transfer requests to relaying banks in the flow for withdrawal of funds to member merchants

As such, in terms of competitive conditions, an equal footing is not secured between banks, which are able to join the Domestic Funds Transfer System, and nonbank code payment providers, which can connect to it only through banks.

For this reason, from a competition-policy perspective, 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.

3. Systemic issues (the impact of payment of wages to fund transfer service provider accounts on an equal footing under competitive conditions for code payment)

While at present wages may not be deposit transferred, even in part, to non-bank accounts, such as accounts with fund transfer service provider, if 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.

On this point, according to a questionnaire administered to consumers, approximately forty percent of users would consider having a part of their wages transferred to their accounts with code payment services if it were possible to receive wage payments in accounts with nonbank code payment provider. Thus, it would appear that there is some demand for such a service.

Since at present the government is considering permitting payment of wages to fund transfer service provider, from a competition-policy perspective, it can be considered that permitting payment of wages to accounts with fund transfer service provider would have a desirable effect on securing an equal footing in competitive conditions between banks and nonbank code payment providers that provide code payment services.

Chapter 5: Future efforts

This survey was conducted as a fact-finding survey regarding the actual state of code payment transactions and resulting issues related to transaction practices.

In the future, any specific matters that cause the legal issues the AMA arising in transactions between banks and nonbank code payment providers will be responded to strictly and appropriately.

This survey also has identified structural issues related to systems and structures concerning the market environment for cashless payment including code payment from the perspective of maintenance of a competitive environment. Competition-policy issues related to these points should be resolved in the future through appropriate study.