NRI

lakvara vol.236

# Debit-card PWCB services: challenges and outlook

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# **Executive Summary**

Japan's Financial Services Agency will reportedly authorize financial institutions to offer debit card PWCB (purchase with cash back) services, already popular overseas, as an outsourced cash-withdrawal service under banking laws. Although the requisite infrastructure upgrades will be costly and Japan's existing infrastructure and payment practices pose numerous difficulties, PWCB services could help bring about a cashless society through such means as reducing costs.

#### **Debit cards and PWCB transactions**

Debit cards, issued by banks or other financial institutions, are used to pay for purchases from merchants. Debit card transactions are settled in real time by transferring funds from the cardholder's account to the merchant's account. Debit card services available in Japan include J-Debit and branded debit cards. J-Debit enables financial institutions' cash cards to be used to make purchases at participating merchants. Branded debit cards are likewise issued by financial institutions but bear a brand name such as Visa or JCB and can be used at participating merchants both in Japan and abroad. Japan's Financial Services Agency (FSA) is reportedly laying the institutional groundwork to enable debit card purchase-with-cash-back (PWCB) transactions<sup>1)</sup>.

PWCB transactions allow consumers making debit card purchases at a store to receive cash back from the cashier. The amount of cash dispensed to the consumer is added to the charges for the consumer's purchase, the sum total of which is transferred from the consumer's debit card account to the merchant's account. PWCB transactions were originated by Tesco, a major UK supermarket chain, shortly after branded debit cards' advent in the UK. Tesco saw PWCB transactions as a way to reduce the amount of cash in its tills, thereby reducing its cash management costs and the risk of theft losses. Meanwhile, PWCB transactions benefit debit card users by saving them the trouble of visiting a bank or ATM to withdraw cash and also sparing them from ATM fees<sup>2)</sup>. PWCB transactions have consequently gained widespread popularity in the US, Canada, Australia, New Zealand and some European countries, including Germany and the Netherlands.

#### NOTE

 According to a December 2015 Financial System Council working group report and media reports.

Debit-card PWCB services' implementation methods, including fees, differ among countries.

However, substantial differences in settlement infrastructure and payment practices between Japan and other countries pose a number of challenges to PWCB services' prospective rollout in Japan.

# Obstacles to implementation of PWCB services in Japan

Currently, both J-Debit and branded debit card issuers charge merchants a processing fee based on transaction value. If merchants were to begin offering PWCB service under the status quo, they would be charged fees on not only the value of customer purchases but also the amount of cash they dispense to customers in PWCB transactions. In the case of purchase transactions, merchants are willing to pay card processing fees because they earn profits on the merchandise sold, but if charged fees on cash-back amounts, they are unlikely to offer PWCB service unless they derive a significant ancillary benefit from doing so, such as increased customer traffic due to an absence of banks/ATMs nearby.

This disincentive could be eliminated by distinguishing between PWCB transactions' purchase amount and their cash-back amount and either exempting the cash-back amount from processing fees or, conversely, compensating the merchant with a cash-back processing fee paid by the debit card issuer. The prospect of earning fee revenues would increase the probability of merchants offering PWCB service. However, there would need to be some means of distinguishing between PWCB transactions' purchase amounts and cash-back amounts, such as electronic messages transmitted from merchants' card reader terminals to debit card issuers' computer systems. Upgrading merchants' terminals and issuers' IT systems would be both costly and time-consuming.

Additionally, merchants would find themselves in the cash dispensing business, which could result in slower-moving checkout lines and, in turn, opportunity losses. Another risk is that cashiers may inadvertently (or even intentionally) dispense too much cash to customers (to prevent such losses, merchants install high-end cash registers that automatically dispense change once payment is tendered). Banks and ATMs are generally conveniently located throughout urban Japan. With the amount of cash in retailers' tills decreasing in the wake of growing use of debit/credit cards and e-money, cash registers would be quickly depleted of cash if customers requested cash-back of ¥10,000 or ¥20,000 as if withdrawing cash from an ATM<sup>3)</sup>. In such an event, retailers would have to stock their cash registers with extra cash to dispense to customers, thereby negating one of PWCB transactions' intended benefits.

<sup>3)</sup> The average cash withdrawal from Seven Bank ATMs by persons using a cash card issued by a bank other than Seven Bank is ¥37,000 (source: Seven Bank disclosure documents).

Meanwhile, card companies with large merchant networks do not stand to benefit much from PWCB services. While branded debit card issuers directly enter into merchant agreements with all merchants that accept their cards, the J-Debit network comprises both direct merchants that have entered into merchant agreements with financial institutions and indirect merchants that have entered into merchant agreements with other parties, such as card companies. These indirect merchants, many of which have entered into merchant agreements with card companies, account for over 60% of J-Debit transactions. Many card companies would therefore be responsible for merchant network management under the FSA's plan for PWCB service. However, debit cards are a service of financial institutions. Card companies have little if any incentive to upgrade their networks or merchant terminals or to monitor merchants' PWCB transactions. Quite a few card companies have merchant agreements that still cover only credit card transactions and are therefore not set up to accommodate debit card transactions, even if the merchants in their networks are able to accept debit cards.

In Japan, debit cards are issued by financial institutions, credit cards are issued by credit card companies, and most merchants are under contract with card companies that are responsible for merchant network management. In this respect, Japan differs from overseas countries where both debit and credit cards are issued by financial institutions and merchants enter into merchant agreements with third-party vendors that provide card-reader terminals or network services on behalf of financial institutions. In such an environment, changing merchants' existing card-processing arrangements for the benefit of debit cards alone would likely prove difficult. Incentivizing card companies to cooperate with debit-card PWCB services is thus another key issue.

# How to resolve such challenges and contribute to a cashless society

While implementation of PWCB services poses many such challenges, if these challenges can be resolved well enough to enable widespread use of PWCB services, the services could help usher in a cashless society<sup>4)</sup>.

The biggest hurdle is the cost of the IT system upgrades that would be required. These upgrade costs could potentially be reduced by utilizing currently unused data transmission bandwidth. They could be reduced further by having network providers ascertain PWCB transactions' cash-back amounts and report them to financial institutions, although some system upgrades would still be required. Card

4) One policy objective in the 2014 version of the Japan Revitalization Strategy include improving the convenience and efficiency of consumer payments through widespread adoption of cashless methods of payment leading up to the 2020 Tokyo Olympics. reader vendors would be able to sell new terminals and network and inter-company settlement service providers may benefit from new outsourced business opportunities, such as managing cash-back transactions and handling consumer inquiries. Financial institutions may have an incentive to pay fees to merchants on cash-back transactions if such transactions reduce the financial institutions' ATM-related costs. Amid rumors of ATM fee increases, consumers would benefit if they could access cash free of charge while shopping, saving them a trip to a bank or ATM.

If the masses get into the habit of carrying small amounts of cash and topping up their wallets at stores instead of periodically making large cash withdrawals from ATMs, this behavioral change would be a step in the direction of a cashless society. Carrying less cash may also lead to increased credit card usage. If debit-card PWCB services are predicated on the use of chip-enabled debit cards, they would help attain the Japanese government's goal of full migration to EMV card processing to enable foreign visitors to Japan to confidently make credit/debit card purchases<sup>5)</sup>.

5) In a February 2016 action plan for improving the security of credit card transactions, the Ministry of Economy, Trade and Industry announced a goal of upgrading 100% of credit cards and merchants' card readers to EMV technology by 2020.

Instead of aiming to transition to a 100% cashless society in one leap, Japan might be better off limiting cash in circulation to small-denomination banknotes as a first step, like in the US, where bills in denominations larger than \$20 are rarely used. In light of Korea's consumer debt problems caused by its drastic policies favoring credit cards as a means of payment, debit card usage may be a better path to a cashless society. However, realizing a cashless society will require large-scale coordination among industries and active government intervention. How committed the FSA is to implementing debit-card PWCB services remains to be seen.

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