Chapter 7
A Coinless Society as a Bridge to a Cashless Society: A Korean Experiment

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Abstract The Bank of Korea (BoK) is planning to create a coinless society by the year 2020. This initiative was initially motivated by the need to reduce the inconvenience associated with the use of coins, to save the cost of minting coins and to help the smooth change-over in the event of a possible redenomination of the Korean Won (KRW). But as Korea is well equipped with cashless payments such as credit cards and FinTech payments, this initiative was further expanded to test the possibility of a cashless society before ultimately shifting to it. Eliminating coins from circulation means that the BoK is developing an alternative payment instrument to coins for the giving and receiving of small change in commercial transactions. This study evaluates the merits of different possible electronic payment methods and services such as credits cards, public transportation cards, electronic cash receipts and digital wallets, and shows that Korea has a high potential to realise not only a coinless society but also a cashless society. If realised, a coinless society will mark a new era that will herald the end of the age of commodity money and eventually paper money.

7.1 Introduction

The Bank of Korea (hereinafter, the BoK) is planning to create a coinless society by the year 2020. In its 2016 edition of the Payment and Settlements System Report, it says:

> As the retail payment networks are well organised in Korea, and nearly every person has a current-account with a financial institution, the implementation of a 'coinless' infrastructure would serve to reduce the use of coins greatly. To this end, the BoK will form a joint research group together with financial institutions and specialised IT companies, and based upon the group's recommendations, work to devise the most effective measures for achieving a coinless society (Payment and Settlement System Report 2016a, pp. 65–6).

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This initiative should receive special attention because, unlike the idea of the cashless society which was mainly motivated exclusively by the special monetary policy environment of some advanced countries characterised by zero and negative interest rates, the interest in the coinless society could be universal, and not be limited to Korea. There are indeed three main reasons why the BoK came to launch this project. No doubt, the first important reason will be related to the reduction of the social costs and inconvenience associated with the use of coins in diverse economic transactions, not to mention the direct cost of minting coins incurred by central banks. As pointed out, given Korea's well-developed non-cash payment instruments and methods such as credit cards and FinTech settlements and payments, these gains will be obtained with relatively small implementation costs. The second reason behind the initiative would be to take advantage of the experiment of a coinless society in order to test the *possibility* of a cashless society before ultimately shifting to it. Eliminating coins from circulation has smaller security risks and information protection costs than eliminating all cash, making the shift to a cashless society easier. A coinless society will mean that Korea is equipped with an electronic payment infrastructure which will allow it to dispense with coins for the giving and receiving of change in commercial transactions. For instance, if an individual buys an item worth Korean Won (KRW) 9500 and pays with a banknote of KRW 10,000, he or she should own credit cards or other electronic payment instruments to be credited with KRW 500 "change" or *virtual* change, instead of receiving a KRW 500 coin in *real*, physical, change.[1] In this process, diverse alternative instruments can be used such as credit cards, public transportation cards, electronic cash receipts or digital wallets. This infrastructure could be extended in order to realise a completely cashless society. The final reason that pushed forward this plan was the increasing public calls for the re-denomination of the Korean currency. The move towards a cashless society *via* the coinless project would help the smooth change-over in the event of a possible re-denomination of the Korean Won.

To explore the best way to move towards a coinless society in Korea, this study tries to evaluate the merits of different possible electronic payment methods and services in order to substitute coins in the giving and receiving of small change.

This study shows that, against the backdrop of Korea's highly developed IT and mobile phone infrastructure, there are already many private on-line and off-line payment instruments and services that will allow for coinless as well as cashless transactions. If these new payment services which, to date, have emerged rather spontaneously could be successfully harmonised and promoted with a clear target and direction set by the government and the BoK, it might not just be a simple dream to realise a coinless society in Korea by the year 2020. This will clearly be a historic event that officially announces the end of the age of commodity money, which might even be followed by the end of the age of paper money.

The organisation of this chapter is as follows. In Sect. 2, an evaluation of the current status of non-cash payment instruments in Korea is made. In Sects. 3 and 4, the

[1]The exchange rate of the Korean *won* (KRW) *vis-à-vis* US dollar is fluctuating between 1000 and 1200 KRW. But for the sake of simplicity, one can suppose that 1000 KRW = 1 US dollar.

cost and benefits of a coinless society is attempted, and, on these grounds, the best method for realising a coinless society is explored. In Sect. 5, different non-cash payment instruments and ways for creating a coinless society are reviewed, together with the current projects of the private sector. Finally, in Sect. 6, the time plan of this project pursued by the BoK is presented together with some of the possible challenges.

7.2 The Current Status of Non-cash Payments in Korea

The widespread use of Internet and mobile phones together with the development of financial technology are bringing about new digital payment instruments and services that are rapidly replacing the use of cash in payments. For instance, according to a survey on the use of payment instruments conducted by the BoK, the proportion of cash used in the transactions of individual Koreans dropped to 26% in volume and 13.6% in value in 2016 from 37% in volume and 17% in value in 2014. Underlying this trend is the fact that Korea is well equipped with high speed IT and mobile phone infrastructure, allowing it to operate highly effective retail payment systems and thus to avoid the use of cash in ordinary transactions. In particular, credit, debit, and prepaid cards are widely available and new mobile phone payment technology, combined with these, provide diverse new ways of paying in many circumstances. For instance, the proportion of credit-card use in 2016 was 50.6% in terms of the transaction payment volume and 54.8% in terms of payment value, surpassing that of cash (26% in volume and 13.6% in value respectively) by a wide margin (Figs. 7.1 and 7.2).

As a result, Korea is currently one of the countries with the lowest use of cash in the world (See Table 7.1).

Nevertheless, many Koreans still continue to use cash in their retail transactions. In 2015, ordinary Koreans were estimated to carry an average of KRW 74,000 in cash in their pockets, though it had declined slightly by KRW 3000 from KRW 77,000 in 2014 (BoK 2016a).

Currently, the BoK issues banknotes in four denominations KRW 1000, 5000, 10,000 and 50,000, and coins in six denominations KRW 1, 5, 10, 50, 100 and 500. Of the total amount of banknotes and coins issued, banknotes account for 97.14% and coins only 2.6%. Their unit issue costs are KRW 123 and 87 respectively. Among the banknotes, the KRW 50,000 and 10,000 banknotes make up most of the banknotes in circulation, accounting for 76.2% and 20.4% respectively. Among the coins, coins denominated below KRW 100 account for 90% of the coins in circulation while the KRW 500 coin, the largest coin in circulation, represents about 10%. At the end of 2015, the amount of banknotes and coins in circulation issued by the BoK stood at KRW 86.6 trillion.

Disregarding the risk for loss and damage, the use of cash, in particular, coins, is increasingly cumbersome, and the growing on-line banking and shopping makes it even more costly. For example, banks are incurring large administrative costs for the handling and withdrawal of coins. Merchants in shops such as pharmacies, convenience stores (small local shops with extended opening hours) and

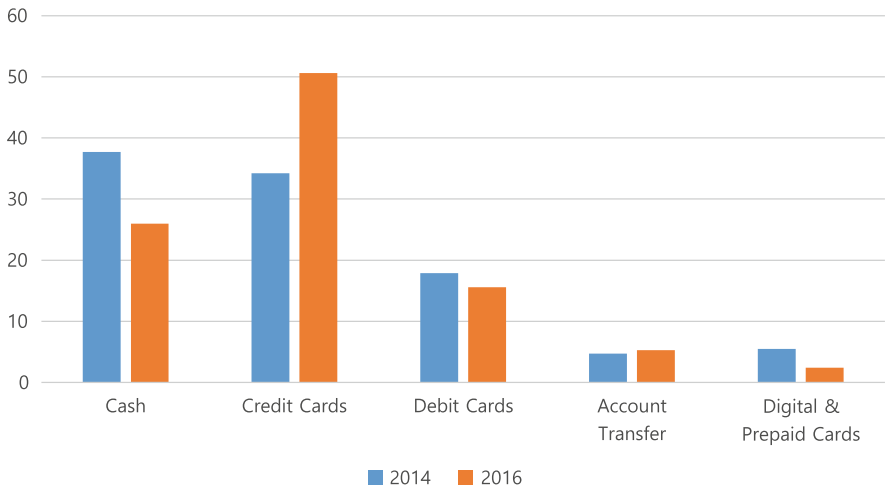

Fig. 7.1 Use of payment instruments by proportion (in transaction volume). Source: BoK

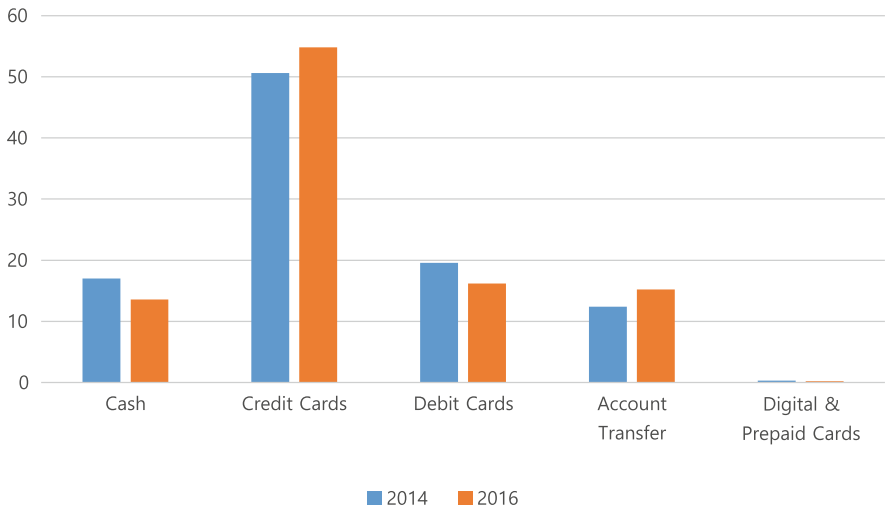

Fig. 7.2 Use of payment instruments by proportion (in transaction value). Source: BoK

supermarkets, have to have small coins, count them and pay them out in change in their business transactions, which requires them to spend extra time, effort and money. The use of coins is extremely costly. Concerning consumers, they have to accept the inconvenience of carrying coins, which are rapidly increasing as the volume and weight of the coins becomes larger. For example, when 20 pieces of the 100 Won coin can be replaced with one prepaid traffic card, the weight is reduced from 110 to 5 g and a separate coin wallet or purse is no longer needed.

Needless to say, the costs that the central bank incurs for the issuing and withdrawing of coins are substantial. As of the end of 2015, for example, there

Table 7.1 International comparison on the use of payment instruments (% in transaction volume)

	Korea (2016)	Germany (2014)	Netherlands (2014)	US (2014)	Canada (2013)	Australia (2013)
Cash	26.0	79.1	57.0	25.6	43.9	47.0
Credit Cards	50.6	1.3	1.0	23.3	30.8	19.0
Debit Cards	15.8	15.3	40.0	30.8	21.1	24.0
Others	7.6	4.3	2.0	20.3	4.2	10.0
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: BOK, Survey on the use of payment instruments (2016b)

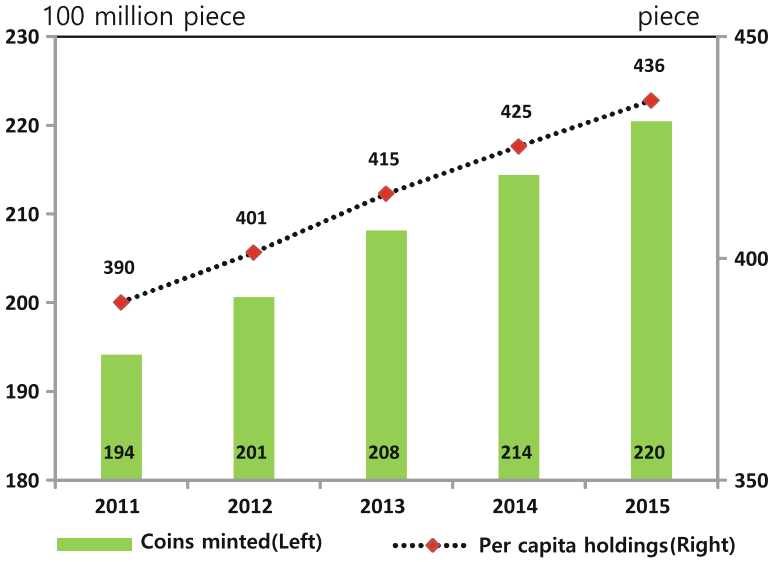

Fig. 7.3 Coins in circulation and per capita coin holdings. Source: BoK

were 22 billion coins in circulation in Korea and an individual Korean is estimated to hold 436 coins on average (See Fig. 7.3).

As the cost of minting the coins is approaching the face value of the actual coins issued, the benefit of seigniorage for the central bank, although slightly positive until now, is declining or likely to become negative. For instance, as of 2015, the BoK spent around KRW 53.9 billion issuing 620 million coins amounting to KRW 70 billion. This may be due to the increase in the issue of the KRW 500 coin, the largest coin in circulation. In 2014, when mainly small denomination coins were issued, the benefit of issuing coins was even inferior to the mint cost (See Fig. 7.4).

Moreover, compared to banknotes, coins rarely return to banks (See, for instance, Fig. 7.5). Many coins are hoarded and abandoned out of circulation. As of 2015, the value of coins damaged and abandoned reaches 1.6 billion KRW with 17.5 million coins (See Fig. 7.6).

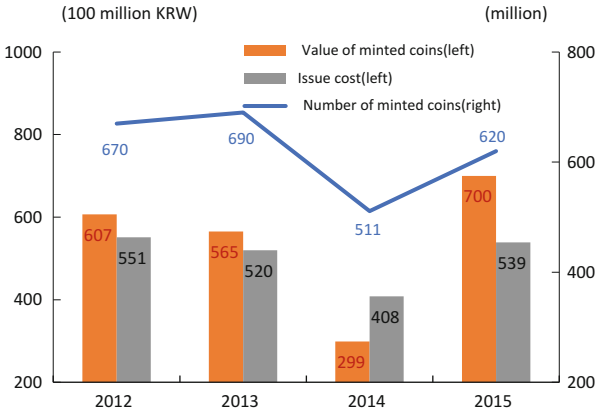

Fig. 7.4 Coins minted and their production costs. Source: BoK (2016c)

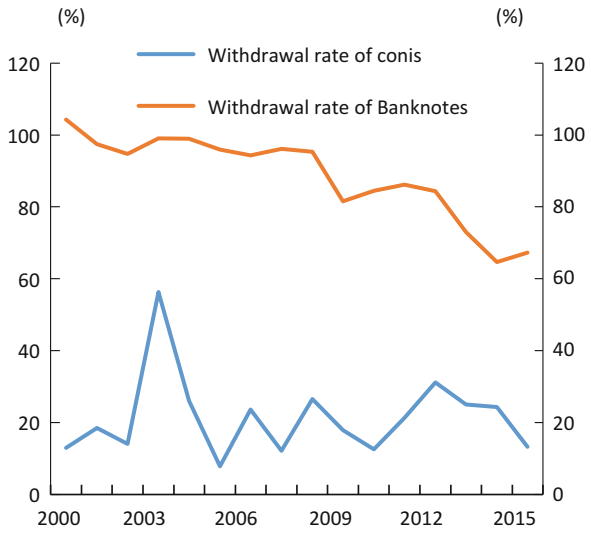

Fig. 7.5 Withdrawal rates of banknotes and coins. Source: BoK (2016c)

7.3 Expected Benefits and Costs

7.3.1 Benefits

As pointed out, the benefits for removing coins from circulation are threefold. First of all, the removal of coins allows the transactions costs to be reduced and efficiency increased. While the BoK saves on the cost of minting and administrating coins, banks and merchants can reduce their administration costs for handling coins and increase their business efficiency. In addition, consumers and households benefit from no longer having the inconvenience of carrying coins. Furthermore, the initiative to remove coins and eventually banknotes helps to contribute to the development of FinTech industries by strengthening the use of different digital instruments and promoting new settlement and payment technologies.

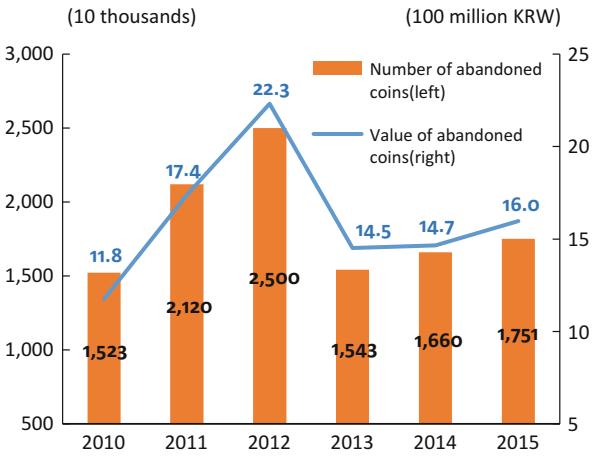

Fig. 7.6 Coins abandoned. Source: BoK (2016c)

The second advantage is associated with the fact that the initiative can be used to test the eventual feasibility of a completely cashless society. Indeed, there is a strong call to substitute cash with non-cash digital instruments in some European countries, thus paving the way for cashless societies. The cashless society, as described by Kenneth Rogoff (2014), is to phase out cash, beginning with large denomination banknotes and later extending to small bills and eventually coins as well. One of the main reasons behind this idea is to prevent anonymous transactions in cash, tax evasion and other illegal activities. Korea's coinless initiative is taking an inverse approach, and starting with the elimination of small denomination coins from circulation with the intention of then extending this to banknotes. Indeed, the anonymity of cash is a source of tax evasion and illegal activity, as Rogoff pointed out, but, at the same time, it is an important element that allows cash to be superior to other payment instruments, albeit not necessarily related to these illegal activities. So, the opposition to such an idea may well remain strong. Nevertheless, Korea's coinless initiative can overcome such opposition. Furthermore, it is important to note that all the existing cash, coins and banknotes, cannot be removed in one step. Before a complete switch-over to a completely cashless society, the experience of a coinless society could trigger a shift in consumer behaviour away from cash and towards digital payment instruments, thereby breaking the lock-in effect of cash use.

The third advantage can be found in the smooth transition to the eventual re-denomination of Korean Won. Compared to the size of Korean economy, the value of its unit of account, the "Won", is too low with USD 1 equaling KRW 1000. Thus, many Koreans think that it is the right time to start re-denomination, not only to fight deflation, but also to bring the underground economy into the open.[2] In Korea, some restaurants already write KRW 5000 (USD 5.00 roughly) as KRW 5.0

[2]Let alone its rounding effect, the denomination is expected to increase the expenditures on real goods by the people who hoarded the cashes, especially large denomination cashes, through illegal transactions or tax evasions because the latter will avoid reporting their cash hoardings to the banks which could be subject to the examination and investigation of tax authority.

on their menus. The number of zeroes should be dropped in line with the growth of the economy. Eliminating coins from circulation will help to familiarise Koreans with such practices and will support the smooth transition to the newly re-denominated unit of currency.

7.3.2 Costs

Just as a *cashless* society presents huge challenges, the transition to a *coinless* society faces more or less the same challenges. For example, coin using industries (such as vending machine companies) may be hit negatively, and certain sections of the population such as old people will not be familiar with the electronic payment instruments and services, which will make the idea of a coinless society unpopular to them. It should furthermore be noted that *any* technological advancement comes with risks and security threats. The importance of a very high degree of security to protect personal information from hackers cannot be over-emphasised. But, in so far as only a small sum of money is at stake, these hurdles are not serious and are likely to be overcome easily. Consequently, the realisation of a *coinless* society looks more probable than that of a cashless society.[3]

7.4 Methods

There are four types of initiatives to be envisaged, depending both on whether the target goal is to remove all cash or just coins, and on which sector is leading the project, the monetary authorities or the private sector, as follows (Table 7.2).

Regarding the withdrawal of cash, two approaches can be considered. The first immediate approach, called the top-down approach, is for central banks to stop issuing cash in the form of banknotes and coins, and to substitute it with non-cash payment instruments. This will automatically ensure the removal of coins and the transition to a cashless society, not to mention a coinless society. However, stopping the issuance of cash completely would not—neither economically nor politically—be a very realistic idea, except for some advanced central banks desperately seeking to enhance the effectiveness of negative interest-rate policies. The second approach, called the bottom-up approach, is to let private agents economise on their use of cash in their transactions. For instance, as some telecom or mobile payment companies offer bonus points and discount benefits, consumers

[3]It is worth noting that the goal of coinless society is not to ban the use of coins but rather to allow consumers to substitute coins with more convenient electronic or digital instruments. Just as the development of credit or debit cards has substituted for cheques, new digital instruments can compete with coins for wider use of consumers.

Table 7.2 Classification of removing cashes and coins

	Removing cash	Removing coins
Top-down approach (Central Bank's Initiative)	A Cashless Society	Issue of Digital Coin by Central Bank (or Mint)
Bottom-up approach (Private sectors' initiative)	Reduce the use of cash in transactions	A Coinless Society

are increasingly attracted to use mobile payment instruments rather than cash. As consumers become familiar with the use of diverse electronic or mobile payment instruments such as credit cards, public transportation cards and digital wallets, they will find the use of cash to be more and more inconvenient, but the complete transition to a cashless society will remain inconceivable for the near foreseeable future. One interesting idea in this regard might be to restrict cashless transactions to some parts of the population or to specific groups of people. For example, foreign tourists could receive cash cards, instead of exchanging their currencies directly into cash, and return them when they leave Korea.

Compared to the withdrawal of banknotes, the removal of coins would be politically and economically easy and the opposition of coin users would be very small. The major hurdle will, instead, be technical, because, as pointed out, there is an urgent need to develop an electronic payment system or service that could substitute for the use of coins in the giving and receiving of small change in everyday commercial transactions. That is, if, as already stated, an individual buys an item which costs KRW 9500 and pays with a KRW 10,000 banknote, he or she should own credit cards or other electronic payments which will be credited with KRW 500, instead of physically receiving a KRW 500 coin in change. Or, an individual should be equipped at least with a loyalty point card, like the airplane mileage system. In this case, small change can be converted into points and, independently of the cash transferred, the points can be debited from or credited to the individual's account. Since the points will not have any physical existence, they will also be safer against theft or loss. At any rate, the key point is to see how the cost of the transfer of information and of maintaining the related network could be sufficiently lowered.

Again, both the top-down and the bottom-up approaches can be considered. Concerning the top-down approach, the central bank (or the national mint) could be the issuer of digital coins, allowing users to store their transaction information on integrated circuit (IC) chips installed inside the digital coins, and to make payments with these. In theory, digital coins work in the same way as private credit cards do. The only difference is that they are created by the central bank. Given that every Korean has his or her own unique national identification card and number, it can be conceived even to add this type of digital coin function onto the identification card or number. This is because each account which stores transaction information that can be credited or debited corresponds to the individual's identification number.

Concerning the bottom-up approach, we can think of different electronic instruments, which correspond to the BoK's current coinless project for the replacement

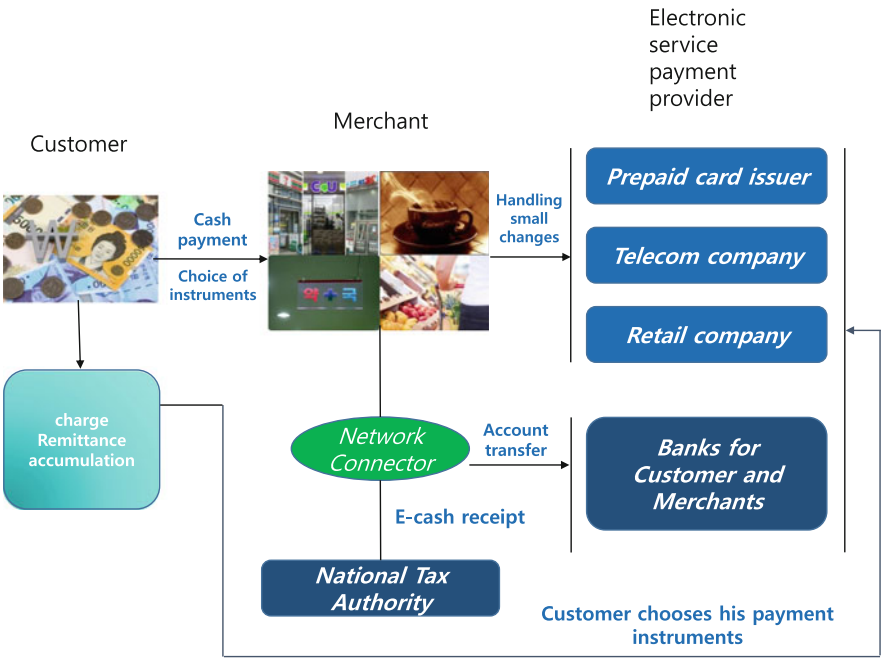

Fig. 7.7 Hypothetical coinless transaction flow chart in Korea. Source: BoK (2016c)

of coins that can be conceived in terms of technical conveniences, institutional environments and economic costs. It is especially worthwhile noting that retail businesses have a strong interest in the withdrawal of coins (but not banknotes) in their transactions because of the high transaction costs (for example, retail companies have to make coins readily available before the opening of their shops). There are already many private companies, retail or otherwise, developing penny change charge services at their own expense in Korea. To give and receive small change both to and from consumers, all different types of instruments are mobilised: prepaid cards, credit/debit cards, bank account transfers and/or digital wallets, etc. As stated, even systems in which consumers can receive their small change in loyalty points, instead of cash, are actively envisaged. Figure 7.7 shows the hypothetical coinless transaction flows under the BoK's coinless plan.

7.5 Exploring Coinless Payment Instruments and Services

Currently, the BoK is considering the following payment instruments or services in order to encourage coinless transactions.

7.5.1 Prepaid Cards

Prepaid cards were first introduced in September 1994 in Korea. They were used mainly at petrol/gas stations, department stores, convenience stores, etc. Currently, one of the most popular cards is for the payment for public transportation fares called *T-money*. T-money is a card and device for paying all public transportation services including buses, subways and also taxies, and is, in some cases, used even for transactions at convenience stores. The T-money function is often added onto various payment (credit/debit) and discount travel cards. When using T-money, the public transportation fare is KRW 100 cheaper than when paying with cash. Moreover, T-money can be charged both on-line and off-line.

Currently, the T-money provider is operating an on-line and off-line coin charging system which consists of using coins to charge for the T-money,[4] but it is faced with increasing operating costs in order to extend this system.

7.5.2 Electronic Cash Receipts

The electronic cash receipt system in Korea is a very unique system which was introduced in 2005 to increase the transparency of transactions and correct tax reporting. This system was initially conceived to thwart the rampant cash transactions that many self-employed business people, especially medical doctors and lawyers, were using in order to evade tax. According to the law, all retail and service sector businesses which earn above KRW 24 million annually are obliged to join this system. In the event that they do not join it, they have to pay 1% of their income as a penalty. In order for merchants to issue cash receipts through their issuing terminals, the customers simply give them either their credit card numbers or their mobile phone numbers together with their cash payments. Then the transaction details are transferred electronically to the National Tax Authority. Currently, the minimum value for an electronic cash receipt issuance is KRW 1 (Initially, it was KRW 5000). Also, in order to stimulate the demand for cash receipts, consumers can receive a tax refund depending on the accumulated value of the cash receipts issued. By the end of 2014, the total number of member shops was 2.8 million, and 1.43 million shops out of the total number of compulsory members, which is currently 1.45 million, had joined the system (98.8%). Currently, the issued receipts number 5.19 billion and the issued value is KRW 9.2 trillion.

The small change that is often required for every cash transaction could be accumulated in the system and returned to consumers via tax refunding. The advantage of this system is that, without any significant additional costs, it allows a network of coinless transactions to be set up.

[4]For instance, consumers can charge the T-money at subway stations and convenience stores directly or through bank ATM, Internet and mobile applications.

7.5.3 Credit/Check Cards

Credit cards were introduced as early as 1969 to increase the transparency of transactions for many self-employed merchants and to charge them the appropriate taxes as well. Credit cards are now the most widely used non-cash payment instrument in Korea, although in popularity, after credit cards, debit cards are also widely used. Consumers can use them in any place where credit cards are also accepted, since the service is provided through the credit card network. According to the specialised credit financial business law, a credit card member shop cannot refuse payment by credit cards or demand any supplementary charges for it, no matter how small the payment is. For example, a payment of 1 Won, the lowest possible amount, can be made through credit cards, despite the complaints of credit card companies about small payment transactions. However, anyone who violates this law will face up to one year in prison or a fine of 10 million Won. So, credit cards are widely used even for very small transactions. In contrast, in the USA, member shops can refuse payment by credit card for transactions of less than 10 dollars. Since May 2016, no signature has been required for transactions of less than KRW 50,000 in Korea.

Different methods and services for charging credit and check/cheque cards in return for small change or for transforming the small change into loyalty bonuses are currently under consideration. Very recently, one Korean credit card company called "*Shinhan Card*" has released the "Simple Plus Card", which offers its users a "penny off" discount benefit that dispenses with change for less than KRW 1000. A wide range of shops including restaurants, convenience stores, supermarkets, hospitals, pharmacies, coffee and bakery shops, etc., provide these benefits for transactions over KRW 20,000 and below KRW 100,000, with a monthly limit on the number of transactions to 10 times. As a result, KRW 100 unit transactions can be removed from the settlement account-balance of customers.

7.5.4 Digital Wallets

With the widespread use of mobile phones, new payment instruments and methods of payment have emerged. Although the use of mobile payments is still limited, it entered Korea in full swing and the proportion of people holding mobile payment instruments has increased dramatically. This provided the grounds for the expansion of digital wallet services. One of the most successful digital wallets is, for example, *Apple Pay*, which combines mobile phone payment with different payment functions and additional services. Currently, many banks and non-bank companies are competing with each other to provide such services and to dominate the market. Table 7.3 shows the list of major Korean companies that provide such digital wallet services along with their service features.

Table 7.3 List of digital wallet service providers in Korea

Sector	Company name	Service name	Remittance	Other functions
Telecom	KT LG SKT	Moca Wallet Smart Wallet Syrup	X X X	Loyalty points/ coupons Loyalty points/ coupons Loyalty points/ coupons
Internet Platform	Kacao Naver	Bank-wallet/Kacao-pay Naver-pay	O O	Prepaid Prepaid
Manufacturing	Samsung	Samsung-wallet/ Samsung-pay	X	Coupons
Retail	Shinsege Mobiliance	S-Wallet M-tic	X O	Gift cards/coupons Debit
Cards	Shinhan Kookmin	Smart Wallet Wise Wallet	X X	Coupons Coupons
Banks	Hana Shinhan	N-Wallet ZOOMONEY	O O	Prepaid/Coupons Prepaid/Coupons

Source: based upon Kim (2015)

Against this backdrop, an increasing number of companies that decided to provide coinless transaction services have emerged. For example, *Naver*, the largest Internet platform company in Korea, in collaboration with *Seven-Eleven*, a convenience store chain, has started a "penny charge" service that allows the consumers, after buying items at the convenience store, to convert the remaining pennies into *Naver* loyalty points. In the event that customers buy from *Seven-Eleven* stores with *Naver*-pay points, they can just show the clerk/cashier the barcode of the *Naver*-pay application downloaded from the *Naver* home page. Payment in *Naver* points is available in more than 8300 *Seven-Eleven* stores nationwide. *Naver*-pay can be charged up to 10,000 Won at a time, and up to a maximum of 100,000 Won. *Naver* pay points can also be utilised in more than 100,000 online stores, and in a variety of music, book and digital-content shops. *Shinsegae* (SSG), a retail company, is also implementing its own penny charge service that will allow its customers to earn SSG money, which replaces the pennies or coins that would need to be given in change after being paid with banknotes. SSG charged money can be used like cash at any of the affiliated shops of the retail company.

7.6 Task and Challenges

There are many "private sector"-led coinless initiatives and attempts under way in Korea. Thus, as consumers do not need to carry cash, given the widespread use of cards, it will be increasingly commonplace and interesting for them not to have to keep penny coins because of the use of penny charging services.

But the widespread use of these services and the full shift to a coinless society would not be possible without the active co-ordination and support of both the government and the central bank. In this regard, the key to the coinless society initiative is to provide the appropriate incentives to the disfavoured participants, in particular, to non-cash payment service providers and network providers for the time being, because they will have to bear the implementation costs of the project, such as the renewal and development of the terminal programmes. When coins are used for small change, the cost of minting the coins will be completely borne by the central bank (or the national mint). If the coins are to be removed by the efforts of private agents, then some of these agents will have to bear the costs, while the central bank will benefit unilaterally from the savings on the minting costs.

Thus, the central bank has a good rationale to support the private initiatives for a coinless society even financially in such a way as to compensate—in part or wholly—for their implementation costs within the limit of the saving in the minting costs. Concerning the financial support to the related participants, a two-tier support system may be needed.

First, to provide electronic payment service providers (such as value-added network (VAN) providers and Payment Gateway) fees for the service of transferring small change to the bank accounts of customers or for charging customers for digital payment instruments. The advantage of this support is that the replacement of coins can be achieved immediately without any additional considerations. As already pointed out with regard to electronic cash receipts, the National Tax Authority pays KRW 18.8 per transaction to the VAN providers, which will cost it KRW 60 billion annually. Similarly, the BoK could consider the provision of financial support, possibly KRW 10 per transaction and as a result KRW 30 billion annually, to these VAN providers.

Second, the BoK could extend its financial support to diverse digital payment service providers, especially if it may lead to a positive external economy. This will help to promote the use of diverse digital payment instruments and the growth of FinTech industries. But it will require time to devise the most appropriate method for the distribution of financial support to the different service providers. However, the BoK is planning to achieve a coinless society by the year 2020, and it is currently operating a working group in order to decide on the detailed procedure for implementing the coinless society initiative.

Once the problem of burden-sharing is fixed, it will not take long for coins to disappear from circulation. Indeed, the BoK hopes to stop minting coins from 2020, and, if it does so, it will also be the ideal moment to launch the re-denomination of the Korean currency.

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