Fight against Underground Economy:

Credit card and cash receipt income deduction policy

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Summary

The Korean government has been striving to enhance transparency in all commercial transactions with the objective to achieve high levels of equity within the context of taxation. One of the keys to accomplishing such objective is the use of the credit card and cash receipts income deduction scheme. Under this scheme, if a taxpayer made a payment via credit card and/or via cash, that individual would be entitled to a deduction of a prescribed percentage of that amount from their taxable income base. In other words, this scheme aims to encourage taxpayers to actively use, in the course of their economic activities, credit cards and cash receipts which allow the disclosure of their transaction history to a third party. The ultimate goal of this scheme is to enhance levels of transparency of the income of those businesses which provide a product or service directly to end users.

The government has been making great efforts to attain success in the operation of the credit card and cash receipts income deduction scheme, which focuses on two major strategies. One of them strives to establish a solid foundation supportive of the active use of credit cards and cash receipts. Even prior to the inception of the scheme, the government devoted its energies to improving the existing foundation supportive of encouraging active user involvement. After the scheme began, the government made it mandatory for businesses of a prescribed size to use the scheme while concentrating on securing the public's acceptance of the scheme by applying various, specific tax-benefit policies and schemes applicable to different types of business operations. The outcome of these two strategies provided the basis for enabling many additional businesses to implement credit cards and cash receipts usage in commercial transactions. The other strategy concerns the enhancement of the public's acceptance of the scheme by combining various government policies and strategies related thereto. Apart from the provision of an incentive for the buyers if they use credit cards and cash in transactions, the government has succeeded to raise the level of the public's acceptance of the scheme by granting the sellers tax deduction allowances which can be offset against an increase in transaction costs and tax burden. The government has especially been able to improve the overall level of acceptance of interested parties of the scheme by operating lottery programs intended for tax breaks for those who find it difficult to meet the minimum consumption requirement set from an expense point of view (i.e. at least 10% of their total salary). In addition, to prevent intentional avoidance of the scheme, the

government induced taxpayers to comply with the scheme in conjunction with various administrative sanctions including the ‘additional tax penalty program’ and the ‘watchdog rewards program’.

Therefore, when this income deduction scheme is reinstated, taking into account the two attempted strategies stated above, it is necessary to expand and complement the existing foundation supportive of the active usage of credit cards and cash receipts as major payment methods, before and after its inception. In addition, it is essential to provide economic incentives for any interested party including transaction parties, in conjunction with administrative sanctions that may be enforced against violators of the scheme. Another consideration in introducing the scheme relates to the opportunity to create supplementary schemes to enable more taxpayers to use the scheme.

I. Introduction

Since the 1997 financial crisis, Korea needed to implement a credible and systematic tool to deal with its ever worsening financial situation, rooted in government spending focused on financial reform, decreased tax revenues, etc. The requirement for resolving such a problematic situation through government policies was reflected in its focus on resolving a fundamental issue – that being of equity between salary income earners and employers - has been continually addressed. Lack of transparency in business income causes revenue loss and equity problem in taxation. Unless the government resolves the problems, it will be a challenge to attain the public's acceptance and trust of various government tax and benefit policies implemented based on the taxable income of individuals and businesses.

Specifically, as a consequence of the 1997 financial crisis, the balance of consolidated public sector to GDP ratio was -3.9% and the operational budget balance to GDP ratio recorded -5.1% in 1998 (a serious budget deficit). So a surge in public concern about the government's financial turmoil followed. The government had never suffered such a level of financial deficit before. It was required that the government expands the base of financial sources and undertakes reviews of forward-looking policies.

Tax authorities have been promoting the creation of an infrastructure for taxation data to make it mandatory for owner-operators to receive a VAT bill or statement in business transactions, and buyers and business owners to exchange payment receipts. Since the introduction of the VAT scheme in July 1977, exchange of VAT statements between business owners has become established practice, yet exchange of payment receipts between buyers and business owners have not been universally accepted in Korea despite tremendous efforts made by the tax authorities[1]. Other than exchange of payment receipts, their efforts to introduce other various means to enhance transparency in transactions including personal checks have not been fruitful. For this reason they deemed it essential to inaugurate a new approach to policies which can accommodate diverse needs.

As a result, the tax authorities decided to shift their current payment receipt policy focused on the case register, to the use of credit cards as a positive means of documentary taxation and cash transactions, which began to be used by the financial

[1] National Tax Service, *NTS's 40-Year History*, p.99

sector in early 1980. By developing various incentive policies and regulations strategies, the government began to promote active user involvement.

For this purpose, tax authorities first focused on related laws and systems. They encouraged business owners to pay entertainment costs using a credit card by rectifying and complementing the Enforcement Decree of the Income Tax Act and the Enforcement Decree of the Corporate Tax Law in October 1984. Effective in 1991 they made it mandatory for business owners to make payments using a credit card at least for 40% (30% for small and medium-sized businesses) of the maximum amount of entertainment expenses allowed by the National Tax Service ("NTS"). In addition, in 1994 when they made it mandatory to implement the credit card income deduction scheme, which had been subjected solely to the Enforcement Decree, they granted businesses a tax deduction based on the amount equal to 0.5% of the amount paid by credit card.

In general, the cause of the low detection rate of the income source of owner-operators can be attributable to two primary methods of recording income and expenses in their income statement; they are indicative of 'omitted income' and 'overstated expenses' methods. 'Omitted income' involves adjusting transactions themselves when the society sustains a low degree of transparency in overall transactions, whereas 'overstated expenses' is indicative of decreasing income reported for a given size of transactions or such a method is applied when it is difficult to make a significant adjustment of transactions. The 'omitted income' method has been used as the major means of tax evasion, over the 'overstated expenses' method of recording.

The 'omitted income' method, which provides the simplest method for 'tax evasion', can be often used when the level of transparency in commercial transactions is relatively low. In particular, owner-operators who provide a product or service directly to end users involve relatively more cash transactions, and this makes it difficult for a third party other than the other transaction party to detect if such transaction existed. This condition tends to entice owner-operators to evade income tax by omitting cash sales in their income statement. When they already omitted certain sales that are difficult for a third party to gather information on the transaction involved, not even a tax audit would be much effective in discovering the incident of omitted sales although the tax authorities have been focusing their tax audit on encouraging taxpayers to demonstrate integrity in the payment of income tax by enforcing rigid penalty clauses upon violators. For this reason, tax authorities have been striving to actively promote the use of credit cards in commercial transactions by focusing on providing administrative guidance.

However, in the case of certain types of businesses which provide a product or service directly to end users, it was found that they tended to avoid accepting credit cards for fear that their income should be disclosed. As a result, to effectively prevent reporting 'reduced income' through omitted cash sales, the government developed a strategy whereby it attempted to induce parties in commercial transactions into behavioral change beforehand, by providing appropriate tax reduction incentives, rather than relying on their tax audit, which is an ex-post and mandatory means. As a result, the government introduced the 'credit card tax income deduction' scheme in 1999, which was designed to encourage buyers (credit card users) to use credit cards as a payment means by providing tax cuts.

The credit card income deduction scheme aims at achieving success in two major policies. First, it involves inducing transaction parties into high levels of transparency in transactions, abandoning the existing transaction practices that make it difficult for a third party to find out the existence of certain transactions involved. Credit card-based transactions helped to improve transparency in both 'particular' transactions and other transactions related to the provision of the product or service involved in the transaction because transaction records will be retained by both transaction parties and credit card companies. In addition, with a tax incentive available to end users, the relatively greater portion of cash transactions in the stage of consumption can be reduced. Such reduction will help to improve the overall social transparency by encouraging buyers to choose other transaction means providing an even higher level of transparency, including discouraging the tendency of transaction parties to attempt tax evasion.

Secondary, it helps to reduce the increasing tax burden on salary income earners. It was generally agreed that there was a difference in levels of transparency between the taxable income of salary income earners and that of owner-operators depending on the type of income. In other words, it was found that employers have been reporting to tax authorities the accurate figure of salary paid to their workers, whereas the taxable income of businesses reported to tax authorities was found to be less than the actual income generated from their transactions with buyers. A considerable difference in tax attributable of the type of income between salary income earners and businesses has caused the government to implement tax policies relatively more favorable to salary income earners. By providing income deduction based on credit card payments for only salary earners, the government was also able to achieve equity in tax under the tax system for salary income and business income.

Meanwhile, it was assumed that the inception of the credit card income deduction scheme has significantly contributed to materializing the tax base of owner-operators in the early 2000's, with the active participation of salary income earners in the scheme. However, due to the persistence of cash payments in commercial transactions, the government had to come up with additional policy considerations. In other words, even though implementation of the said scheme resulted in great user involvement in credit card transactions, cash transactions still accounted for a greater portion of total commercial transactions. Cash transactions accounted for as much as 57.4% (234.6 trillion won) of the total private consumption expenditures (408 trillion won) as of 2002. It appeared that such cash transaction practice was attributable mainly to the fact that end users were induced to use cash when they make a payment to businesses that provide a product or service directly to end users, including professionals, hospitals and clinics, after-school academics, restaurants, etc. Credit card sales accounted for up to 90% of the sales of certain business sectors including restaurants and bars, yet the relatively high portion of cash transactions indicated that a significant portion of cash sales were not being recorded in their income statement. As a consequence, the government felt compelled to introduce a new strategy which could help discover the source of income from cash transactions while actively promoting the use of credit cards. One of such strategies contemplated was the 'mandatory receipts designation' that the late president Noh pledged to fulfill during his presidential campaign. However, this scheme was replaced by the 'cash receipts scheme' for reasons including difficulty in managing mandatory receipts and the need for expanding the existing computerized facilities. Similar to the case of the credit card income deduction scheme, the 'cash receipt income deduction' scheme was legislated at the end of 2003 and its implementation commenced in 2005 taking into consideration the preparatory period including that of meeting infrastructure needs.

II. Description of the Schemes

1. The credit card income deduction scheme

A. Overall scheme

The 'credit card income deduction' scheme was introduced in September 1999 with the intent of making public income sources of owner-operators and reducing the tax burden for salary income earners. More specifically, the scheme was implemented temporarily until November 11th, 2002 under the Special Tax Treatment Control Act, and the benefits of the scheme were made available only to salary income earners. In the case of salary income earners, they exhibited relatively higher transparency in reporting taxable income compared to owner-operators. Then the issue of equity in taxation depends on the type of income, i.e. between salary income and business income, under the current tax system. The government thus felt compelled to come up with an appeasement policy to resolve this issue.

Specifically, one's deductible (the amount deductible from one's total annual salary) was set to be 10% of the amount in excess of 10% of the person's total salary if the amount paid through credit cards amounted to 10% or more. In addition, to prevent excessive tax deduction, the maximum limit of deductible was set; i.e. either an amount of 3,000,000 won or 10% of the total salary for the taxation year, whichever is less, was to be applied. Setting such a maximum limit aims to prevent a drastic increase in loss on tax revenues resulting from the inception of a new tax scheme. The amount of one's credit card payments included in the employee's deductible covers the employee him/herself and his/her immediate family members who make a living together with the worker. Particularly, the employee was allowed to include in his/her deductible the amount paid through a credit card by his/her spouse and immediate family members whose annual income does not exceed 1 million won and who are required to file income tax return under the Income Tax Law. This policy aims to increase private consumption using credit cards and help reducing the tax burden in proportion thereto by allowing consumption by family members to be covered by the worker's deductible. In this respect, along with credit cards, a main means of transaction, debit card transactions were also recognized in implementing the scheme. It is because debit card transactions are expected to bring similar effects to credit card-based transactions, given that the scheme pursues transparency in commercial transactions.

Meanwhile, the government also set exceptional cases in which the credit card income deduction scheme shall not be applied to the amount paid using credit cards. First of all, expenses associated with real estate lease and other business income, forest income or incorporation expenses were excluded from the income deduction scheme. In the case of one's unearned income, expenses incurred in the course of earning such income are excluded in the calculation of the person's taxable income. Therefore, such an amount is deemed to have been excluded from credit card payments which are eligible for deduction from income. In addition, payments associated with an undesirable method of using a credit card or debit card have been ineligible for deductions. An undesirable method of using a credit card or debit card defined by the provisions of the Enforcement Decree means the receipt of a credit card slip which does not involve the delivery of goods or services or the receipt of a slip carrying an amount which exceeds the amount of actual purchase. Another example of ineligibility for deductions involves the receipt of a credit card slip which is issued under the name of another credit card or debit card participant if the payer had the knowledge of such unethical practice.

The NTS (National Tax Service of Korea) has excluded certain expense items from eligibility for credit card deductions since the credit card payment is not in compliance with the objectives of its policies in respect to the tax deduction scheme. For instance, transactions with the central government or local governments will not be contributory to enhancing transparency in commercial transactions even when the transaction means of cash has been shifted to credit cards. Transaction items covered in such category include premiums paid to the government under the National Pension Act, National Health Insurance Act, Employment Insurance Act, etc., as well as life insurance premiums and accident insurance premiums paid to private insurance companies. At the same time, the example of the eligibility for deduction of those premiums paid for life and accident insurances sold by a post office, agricultural cooperative, fisheries cooperative, credit union, or community credit cooperative that belong to the public sector which is significantly influenced by the government. Another example of ineligibility for deductions includes various dues and fees including electricity, water and gas fees paid to the government or public agencies, including tuition fees paid to different educational institutions, even when such fees were paid using a credit card.

B. Additional efforts for the effectiveness of the scheme

Since the inception of the credit card income deduction scheme, the government has been exerting various policy initiatives to enhance the scheme's effectiveness. Given that the scheme has helped to further encourage the use of credit cards for payment by providing tax incentives for buyers, it was necessary to provide tax incentives for business owners as well so that buyers could make payments by credit card in more commercial transactions. By providing tax incentives for both buyers and business owners at the same time, the government pursued the seamless implementation of the scheme.

From the point of the business owners' view, cash transactions are preferable over credit card transactions. Cash transactions provide the opportunity to attempt 'omitted sales' in their income statement and tax evasion. Such practice also involves less costly transactions because payments using a credit card incur fees payable to the respective credit card company. Taking in account such cost burden upon sellers, the government focused its efforts on the reduction of the cost burden by implementing various tax relief schemes including furthering a deduction of VAT based on the amount of credit card payments, and tax benefits for the portion of increase in reported income.

1) VAT deduction based on credit card sales

The 'credit card sales tax relief' scheme involves a deduction of a prescribed amount from the taxes payable by applying a prescribed rate of tax credit when the business owner has provided VAT-applicable goods or services and accepted a credit card upon the receipt of payment. The scheme aims to help reduce the cost burden upon business owners resulting from credit card transaction to ultimately promote the use of credit cards, which is a transparent means for payment. Another reason for this is that the scheme is expected to produce similar results to existing tax relief scheme whereby a tax relief equivalent to 0.5% of the credit sales will be provided if a business owner issued a VAT statement using a cash register for the payer.

The scheme became mandatory in 1994 as set forth in Article 32-2 of the Value-Added Tax Act. The tax credit of 0.5% at the time of implementation of the scheme was set to be the same rate applied to the transactions using a cash register, with the intent of preventing the distortion of the choice of payment means. The application of the scheme

was limited to small business owners which are required to enhance transparency in commercial transactions.
With the inception of the credit card income deduction scheme, in 2000 the government increased the tax credit rate from 1% to 2% to encourage active use of credit cards in commercial transactions. At the same time, it attempted to prevent excessive tax incentive grants by setting a maximum limit of tax credit at 5 million won. It limited those to be eligible for the tax credit on businesses with individuals such as retailers, restaurants, accommodation service, public bath house, barber shops, beauty salons, ferry service, and issuers of admission tickets. Including debit card for the tax credit scheme, the government attempted to discourage selective use over the two.

In addition to determining a tax deductible rate for the amount paid by credit card, the government established reference provisions which the Director of the NTS can designate potential credit card participants and encourage them to participate in the credit card income deduction scheme. In determining potential credit card participants, the government gave a broad range of considerations within the parameters set under the Enforcement Decree of the VAT Act, including the types of business operations, the size of business, and business locations. Such designated potential participants consisted of businesses providing a product or service directly to end users (who are not a business owner), including retail, restaurant and accommodation services, etc. In this respect, the NTS (tax authorities) was delegated to check the industry-specific rate of participation in the scheme to implement differentiated initiatives. Such administrative guidance helped to provide the foundation supportive of utilizing the credit card income deduction scheme in a more effective manner.

2) Tax deduction based on an increase in reported income (sales)

‘Tax deduction based on an increase in income’ involves reduction in the tax which increases with the use of the credit card scheme intended to improve transparency in commercial transactions. In other words, this scheme aims to solve the problem of seller’s cost burden, i.e. credit card commission fees, and their tendency to avoid implementing the scheme for fear that their taxable income should be disclosed. Increase in the amount paid through credit cards in the appropriate taxation year, relative to the previous year, may be deducted from tax due. The amount would be that 50% (the maximum limit) of increased credit card payments times the share of credit card sales in total income. This scheme which began in January 1999 for the purpose of promoting credit card transactions served as the foundation supportive of the effectiveness of the credit card income deduction scheme (September 1999) which was focused more on the buyers.

3) The credit card slips lottery program

Besides the credit card income deduction scheme focused on salary income earners, tax authorities launched the credit card slip lottery program (which covered debit card slips) on January 1, 2001 in order to further promote the buyers' use of credit cards.

In the case of the credit card deduction scheme, the requirement that salary workers eligible for income deduction should use at least 10% of their total salary in credit cards, which will reflect the situation of their current usage, may discourage buyer participation in the scheme. In addition, even though a person is eligible for such deduction, that person would be entitled to income deduction at a maximum of 10% of additional portion of usage, not exceeding 3 million won. This may reduce the incentive effect of the scheme. The credit card slip lottery program was introduced as a strategy for inducing low-functioning group of buyers to use credit cards.

By offering a lottery prize of up to 100 million won, the government was able to motivate low-income people to actively use credit cards. Under the current tax system, people with low income were granted a significant amount of income deduction so that tax burden is very low. This program helped to motivate the use of credit cards among people with low income. The credit card slip lottery program was implemented through the NTS, and transactions which were not eligible for deduction under the program included overseas transactions, transactions under the name of a company or group, and various dues and taxes, which were deemed irrelevant to enhancing transparency in domestic commercial transactions.

Along with the lottery program for consumers, Korea also launched lottery program for sellers. This scheme was initiated and financed by the Credit Finance Association (CREFIA), a private organization, with the intent of expanding supplier's credit card networks.

First lottery drawing was conducted targeting those credit card slips (including debit card slips) in February 2000. The credit card slip lottery program evolved with the use of credit cards being quite common these days. With the growth of credit card uses, first of all the lottery program which was focused on sellers was abandoned in January 2005. This was followed by the discontinuation of the lottery program in January 2006, which had been focused on credit card users (buyers). However, the lottery program had still been maintained based on debit card slips and cash receipts due to the need for motivating buyer involvement.

2. The cash receipts income deduction scheme

A. Overall scheme

The cash receipt deduction scheme was introduced to enhance transparency in cash-based transactions which account for a significant portion of total commercial transactions despite various strategies implemented by the government to promote the active use of credit cards. To complement the credit card income deduction scheme, in 1999 the government considered launching the scheme called the 'tax card' scheme[2] as one of its strategies for reducing owner-operations' cost burden, i.e. credit card commission fees, which were increasing with the growth of credit card transaction uses.

As an outcome of the credit card deduction scheme, a strategy for encouraging use of credit cards, the rate of the amount of credit card transactions relative to the total private consumption expenditures significantly increased to 39.0% in 2004 from 23.6% in 2000. But increasing rate was decreasing and low: For example, the rate in 2003 was -2.0%p (from 42.6% to 40.6%) which was significantly lower than that in the preceding year which saw a 5.7%p growth (from 36.9% to 42.6%). Such diminishing effect of the scheme provided the reasons for undertaking additional reviews of the scheme. In particular, it was due to the government's strategy for promoting the growth of credit card transactions by expanding credit card network, which did not serve as a merit for small micro businesses with low profits experiencing the cost burden due to commission fees. As a result, the government began to promote another strategy directly focused on cash transactions.

[2] The Tax Card program was designed to enable the automatic notification to the NTS of cash transaction details via credit card system when the Tax Card (a tentative name), used exclusively for cash payment, is presented for paying with cash. But at that time, credit card terminals were not available on a nationwide level and there was the likelihood of the public's rejection. Realizing that it was difficult to implement policies under the given circumstances, the government wanted to motivate buyers for the network participation before making a decision on whether it would implement the scheme.

Table 1. Trend of credit card and cash payments

(unit: 100 billion won, %)

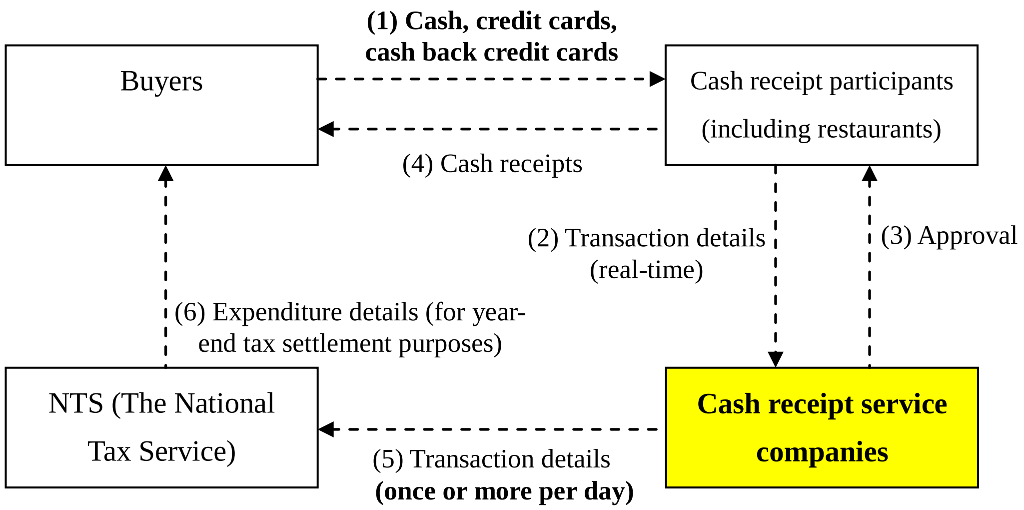
Category	2000	2001	2002	2003	2004	2005
Final private consumption expenditures	3,303.9	3,642.5	4,087.2	4,201.0	4,350.6	4,654.3
Credit card payments	779.8	1,343.3	1,741.3	1,706.9	1,698.1	1,984.2
Credit card transaction rates	23.6	36.9	42.6	40.6	39.0	42.6
Cash transaction rates	76.4	63.1	57.4	59.4	61.0	57.4

Note: The amount paid by credit card excludes personal banking services and the corporate purchase card (launched in 2000). However it includes debit card and check card transactions (except pre-paid cards).

Sources: The Bank of Korea (ECO), The Credit Finance Association

With the cash receipt scheme launched, cash receipt network participants are required to issue cash receipts through cash receipts network when the buyer presents the card (including point reward cards and credit cards) or mobile phone number, along with cash for a product or service delivered and cash receipts service companies should submit information on their individual cash transactions to the NTS.

Figure 1. Flowchart of cash receipt policy



The cash payment flow under the cash receipt system shows the detailed operational procedure for the scheme. The cash receipt network participant is a product or service provider who has a credit card terminal with a ‘cash receipts printer’ in the workplace, and transmits cash payment details via cash receipts service companies to the NTS. Among these companies, since late 2004 the government has been designating businesses that provide a product or service directly to buyers, with their total reported annual sale of 24 million won or greater for mandatory guidance[3] to encourage their participation in the scheme. The person eligible to cash receipt scheme is expressed as ‘buyer’, this category includes businesses, which are issued such cash receipts as supporting documents for business expenditures, in addition to buyers who are issued cash receipts for income deduction purposes. Cash receipts service companies are required to have a cash receipt machine installed in their cash receipt network participants and give approval numbers to be borne on the cash receipts issued. Then they should collect and transmit the details of the cash transactions to the NTS.

Using the cash receipts issued, the buyer is entitled to income deduction on the amount of the cash receipts. Under the scheme, the amount deductible is added to the amount deductible under the existing credit card deduction scheme. As a result, the buyers become entitled to the same deductible rate as they would receive under the credit card deduction scheme alone. Specifically, under the credit card income deduction scheme which also includes cash receipts as of 2005, an amount equivalent to 20% of issued cash receipts, in excess of 15% of one’s total salary was eligible for deduction, with a ceiling of 5 million won.

B. Additional efforts for the effectiveness of the scheme

Various government policies were undertaken for the launch of the cash receipt income deduction scheme and its seamless implementation. In the situation where the credit card income deduction scheme was already being operated for similar goals to be achieved from the cash receipt income deduction scheme, it was found that the government’s various policies implemented in this respect resulted in the equal treatment of the amount paid via cash and the amount paid by credit card. In particular, VAT credit based on the amount of cash receipts issued, tax deduction on the increase in sales attributable to cash receipts, and the cash receipt lottery program have been treated equally as in the case of credit card-based payments.

[3] Article 162-3 of the Income Tax Act and Article 210-3 of the Enforcement Decree of this Act.

1) VAT deduction based on cash receipts

The VAT deduction scheme applied to cash transactions was incorporated into the existing scheme under which VAT deduction is applied to credit card transactions alone. This policy helped promote active issuance of cash receipts where necessary. Deductible rates at the early stage of the implementation of the VAT deduction scheme focused on cash transactions was 1.0%, which has been applied since 2004, with a ceiling of 5 million won for credit card sales. Such reduced deductible rate, relative to the previous deductible rate of 2%, became an impediment to promoting active involvement in the cash receipt scheme. As a result, the government allowed a deductible rate of 1.5% for simplified taxpayers who are engaged in a business such as restaurant and accommodation business which involve relatively more cash transactions.

Table 2. VAT deduction scheme for credit card and cash receipt sales

Year	Deduction rates (%)	Maximum deductibles
1994~1995	0.5	-
1996~1998	1.0	-
1999	1.0	3,000,000 won a year
2000~2003	2.0	5,000,000 won a year
2004	1.0	5,000,000 won a year
2005~2007	1.0 (1.5)	5,000,000 won a year
2008	1.0 (2.5)	5,000,000 won a year
2009~2010	1.3 (2.6)	7,000,000 won a year
2011~	1.0 (2.0)	5,000,000 won a year

1. Deductions are based on the amount paid through credit card or other electronic payment means set forth under the Enforcement Decree of the Value-Added Tax Act.
2. From 2004, the amount of cash receipts issued under Article 126-3 of the Special Tax Treatment Control Act is included in the credit card scheme.
3. The figures in the parentheses are for simplified taxpayers who are engaged in accommodation services.
4. The notation ‘-’ means no maximum limit.

2) Tax deduction based on an increase in reported sales (income)

The government implemented another tax deduction scheme whereby businesses are entitled to a tax deduction based on the increase in issued cash receipts or the relative portion of credit card transactions which include cash transactions (i.e. issued cash receipts) with the aim to lessen the increasing tax burden upon users as a result of the enhanced transparency of business income sources attributable to the issuance of cash receipts. This policy, which has been implemented since January 1999, has complemented the deduction method based on the 'credit card and cash receipts sales', other than the deduction method focused on the 'increase in sales based on credit card and cash receipts payments'. It is assumed that tax deduction methods based on sales serves as a more direct tax deduction from the user's perspective, with the emphasis on lessening the tax burden faced by business owners. Thus, sellers are allowed to choose a preferred method from the two to receive income tax credit.

The deductible rate based on the 'increase in credit card-based sales (amount of income)' has been constantly 50% since the launch of the scheme, with a slight decrease to 40% in 2010. The reason is because the 'increase of credit card sales' serves us as an excellent indicator of the higher degree of transparency in business transactions.

On the other hand, the deduction method 'based on the credit card-based sales' still has the problem of the low degree of relevance to the transparency in business transactions because the deduction under that method does not necessarily mean the increase of transparency. As a result, the deductible rate has steadily been reduced to 5% in 2005 when the cash receipt-based deduction scheme began to be implemented.

Table 3. Income deduction for an increase of credit card sales

Category / Year	(Optional) Deduction rates (%)	
	Based on an increase in credit card sales	Based on an increase in credit card sales relative to total sales
1999~2000	50	-
2001~2002	50	20
2003	50	10
2004~2009	50	5
2010	40	4

3) The cash receipt lottery program

The cash receipt lottery program, which was launched to encourage users to collect cash receipts, was operated in conjunction with the existing credit card slip lottery program. Specifically, since January 2005, the cash receipts-based lottery has been implemented, complemented by junior lottery program operated separately with the aim to enhance the awareness of young people about the issuance of cash receipts. On the other hand, the credit card slip lottery program was discontinued in January 2006 with the aim to further promote the lottery programs based on cash receipts and debit card slips because the tax authorities thought that the use of credit cards in business transactions had already matured.

During the early stage of the lottery program, the maximum limit of prize money based on cash receipts and credit card slips was 100 million won and the prize money was reduced to 10 million won in January 2006 to increase the number of winners. Since August 2007, lottery based on cash receipts has been conducted separately with the intent of making public their income to encourage the voluntary participation by 32 business categories including hospitals, oriental medicine, and wedding halls whose degree of participation had been still low even after the inception of the cash receipt scheme. The cash receipt network participant lottery program was also launched from 2008. The credit card network participant lottery program was stopped in 2005 as the tax authorities concluded that a sufficient number of network participant was secured. The cash receipt network participant lottery program began in August 2008 and was discontinued in 2010 when user involvement in the scheme was deemed to have reached a moderately desirable level.

Table 4. The lottery program for credit card and cash receipt transaction

Year	The scope of transactions eligible for a lottery			Prize Money (won)	
	Users		Credit Card Network Participants		
	Credit Cards/ Debit Cards	Cash Receipts		Max.	Min.
2001.1.	The credit card slip lottery program (include debit card)	-	The credit card participants lottery program	100,000,000	10,000
2004.1.	Separate lottery program for debit card slip	-	↓	↓	↓
2005.1.	↓	Cash receipt lottery program (Separate junior lottery program)	The lottery program is abandoned	↓	↓
2006.1.	Lottery program for credit card abolished.	The junior lottery program is abandoned	-	10,000,000	50,000
2007.8.	↓	Separate draw for low performing businesses	-	10,000,000 (100,000)	50,000
2008.8.	↓	↓	The cash receipt participants lottery program	↓	↓
2009.1.	↓	↓	↓	30,000,000 (30,000,000)	↓
2010.1.	Lottery program for debit card abolished.	Separate draw abolished	The lottery program is abandoned.	50,000	

Notes: 1) The figures in the parentheses are for separate draw for low level involvement in the issuance of cash receipts.

Sources: The National Tax Service, “Regulations regarding the cash receipts reward program”, The Credit Finance Association, data for internal use only

3. Other policies for smooth implementation

Coupled with various government policies, the credit card/cash receipts income deduction schemes, which are designed to enhance transparency in commercial transactions, have settled in as an effective policy instrument. In addition to the income deduction scheme for buyers and the tax deduction scheme for business owners (sellers), the government also invented other policies such as enforcement into the credit card and cash receipts network, transaction cost reducing efforts, and other administrative guidance.

A. Mandatory participation in credit card and cash receipt network

1) Credit card network participation

In 1998 the government presented legal grounds for enforcing businesses to join the credit card and cash receipts networks at the Value-Added Tax Act, the Corporation Tax Act, and the Income Tax Act. So, the director of the NTS may designate owner-operators and corporations having transactions directly with end-users as eligible credit card network participants (mandatory participants).[4]

Furthermore, till now since 1999, the criteria(sales) for ‘mandatory participants’ has been supplemented and reinforced[5] in order to expand credit card network. The criteria have been set by business types to reflect various cost structure. The number of business types under mandatory scheme reached as many as 209 in 1999, which consist of businesses having direct transactions with end-users, including retails, restaurants, accommodation, and other services. This was subsequently followed by 228 in 2001 and 235 types of businesses as of 2009.

Within mandatory scheme, different sales amounts were applied, depending on each business types’ market situation. A business (among retail, restaurants, accommodation and other designated services having direct transactions with end-users) whose sales in the preceding year reached 150 million won or greater as of the first half of 1999 was designated as a credit card network participant. On the other hand, businesses providing

[4] Article 32-2 of the Value-Added Tax Act; Article 162-2 of the Income Tax Act; Article 117 of the Corporation Tax Act.
[5] Twice in 1999 (one in the first half, the other in the second half of the year); Once in 2000; Once in 2001.

professional services were also designated as a potential credit card network participant if their sales in the preceding year reached 48 million won or greater. This was because it was assumed that such business sector demonstrates low levels of transparency in transactions.

The sales standard applicable to different types of businesses as a potential participant has been steadily adjusted downwards, resulting in an increase in the number of eligible participants. It was concluded that the eligible participant designation policy has helped enhance the overall level of user participation in the credit card scheme.

Table 5. Criteria for the designation of credit card network participation

(Unit: million won)

<table>
<tr><th colspan="2" rowspan="2">Category</th><th rowspan="2">Business type</th><th colspan="5">Based on total sales[1)]</th></tr>
<tr><th>1999. 1~</th><th>1999. 7~</th><th>2000~</th><th>2001~</th><th>2008~</th></tr>
<tr><td rowspan="6">Owner-Operators</td><td rowspan="3">VAT non exempt</td><td>Restaurants, accommodation and related services</td><td>150 or more</td><td>48 or more</td><td>36 or more</td><td rowspan="3">24 or more</td><td>24 or more</td></tr>
<tr><td>Personnel service (Professional services)</td><td>48 or more</td><td>48 or more</td><td>36 or more</td><td>All</td></tr>
<tr><td>Retail and other businesses</td><td>150 or more</td><td>120 or more</td><td>72 or more</td><td>24 or more</td></tr>
<tr><td rowspan="3">VAT exempt</td><td>Retail</td><td>150 or more</td><td>120 or more</td><td>72 or more</td><td rowspan="3">24 or more</td><td>24 or more</td></tr>
<tr><td>Hospital/clinics</td><td>150 or more</td><td>120 or more</td><td>72 or more</td><td>All</td></tr>
<tr><td>After-school academies</td><td>150 or more</td><td>120 or more</td><td>72 or more</td><td>24 or more</td></tr>
<tr><td colspan="2">Corporations</td><td>All designated types of businesses</td><td colspan="5">All corporations (no limitations on company size)</td></tr>
</table>

Notes: 1) Clause (1) under Article 210-2 of the Enforcement Decree of the Income Tax Act

Sources: KDI, “2001 Credit Card Participants Increase Plan”, May 2001.

NTS, ‘report of progress toward increase in credit card participants’, Dec 1999.

Individual Income tax act..

2) Cash receipt network participation

During the preparatory period of two years after the decision to implement the cash receipt scheme in 2003, the NTS undertook various policies for achieving the successful outcome of the scheme. For its seamless implementation, starting in the second half of 2004 the government has been focusing its efforts on encouraging the active participation of business owners with a cash receipt system in the work place, along with the designation of potential credit card participants. In particular, the government made arrangements for new credit card terminals purchased after July 2004 to be equipped with a built-in cash receipt system. This action helped to significantly reduce users' cost burden associated with the separate setup of a cash receipt system.

In providing the aforementioned administrative guidance for encouraging businesses participation, the NTS and the Director of the Korea Customs Service undertook various discretionary measures during the early stage after the inception of the scheme, and in January 2005 they came up with the legal ground for providing such guidance. Later the existing legal ground was amended and supplemented by new provisions, with the expansion of the scope of obligations of the sellers from January 2007 thereafter, which included the issuance of cash receipts in addition to mandatory participation in the cash receipt scheme. At that time, concerning the size of individual eligible businesses (participants) in terms of sales, the government set the base amount of sales applied to eligible participant designation at an amount of 24 million won (or more), adjusting it to the base amount of sales applied to eligible credit card participants designation. This condition allowed the two schemes (the credit card scheme and the cash receipt scheme) to be operated on a single system.

Table 6. The criteria for designation on cash receipt network participation

<table>
<tr><th>Category</th><th>Business Type</th><th>Jan.1.2005~</th><th>Feb. 22. 2008~</th></tr>
<tr><td rowspan="3">Owner-Operators</td><td>Professional services</td><td rowspan="3">24 million won (or more)</td><td>All</td></tr>
<tr><td>Hospitals and clinics</td><td>All</td></tr>
<tr><td>Other businesses providing a product or service directly for buyers</td><td>24 million won (or more)</td></tr>
<tr><td>Corporations</td><td>All types of businesses for designation as eligible as participants</td><td colspan="2">All corporations</td></tr>
</table>

Note: Clause (1) under Article 210-3 of the Enforcement Decree of the Income Tax Act.

B. Direct costs reduction policy

1) Reduction of credit card commission fees

Credit card commissions are one of the major impediments not only to increasing the number of credit card network participants but also in encouraging active participation of small business owners in particular. This has led the financial sector to focus on constantly lessening credit card commission rates. One of the examples is liberalization of ‘credit card network sharing program’ which was enforced after December 24, 2001. The program which began on September 9, 1999 was intended to achieve two goals which are first, to improve the high-cost structure involved in concurrent management of participants from previous credit card practice (closed credit card network system) and second, reducing commission rates which are the biggest impediment to promoting credit card uses. However, this program allowed only seven incumbent credit card service companies to enlist credit card network participants, eventually causing the existing credit card market to have a monopolistic structure which was far from the initial goals of such policy. Such a monopolistic structure resulted in serious problems such as the illegal collusion of commission rates and misuse of authority by credit card companies over credit card network participants.

In an effort to solve this problem, the government allowed credit card service companies to choose between ‘shared network’ and ‘their own network’ by changing its order that all credit card service companies should use the shared network. This action enabled the government to promote the reduction of commission rates.

Nevertheless, even until today, the reduction of credit card commission rates is still controversial. In particular, while participation of businesses, including small business owners, in the credit card network has become mandatory, credit card commission rates, which were determined by taking the size of business into account, have yet to be adjusted. This condition is still causing strong resistance from credit card network participants. Though, in an effort to reduce their resistance, the financial sector continue to improve the credit card commission fees disclosure by simplifying the types of relevant businesses into 13 from the existing 177 business types, and there is still a general consensus that further actions are required.

2) Reducing costs associated with the cash receipt scheme

With the aim to achieve success in the cash receipt issuing system into the market, the NTS came up with a strategy whereby NTS provide a free upgrade of businesses' credit card terminals to cover cash receipt program, instead of setting up a terminal exclusively for issuing cash receipts. They grant VAT deduction, 17,500 Won, for cash receipt network participants adopted free terminal upgrade. In addition, they allow a VAT deduction, 22 Won per transmission (15.4 won per on-line transmission), when they transmit details of cash transactions to the NTS.

Grants for the cash receipts service companies in financing expenses associated with the use of the cash receipts scheme (VAT deduction on an acquisition)
(1)The number of set-ups of the cash receipts system x (17,500 won +- 30%)
(2) The number of cash transactions x (22 won +-30%)

C. Administrative sanctions

In an effort to encourage active use of credit cards and cash receipt-based transactions, the government granted various financial incentives including user income deduction and various tax deductions applied to business owners. However the level of such incentives was not sufficient to be offset with the increase in various tax burdens attributable to increase of transparency in businesses' income (sales). This situation may cause businesses' tendency to avoid collecting and issuing cash receipts.

Along with its various tax incentive policies, the government continued to focus its efforts to promote active seller participation in the credit card and cash receipt schemes by implementing various 'tax penalty' schemes and the 'reporter reward scheme'.

1) Tax penalties on denial of credit card payment

As the more businesses accept credit cards, government came up with the tax penalty scheme focused on businesses refused to accept credit cards, with the intent to encourage credit card uses at substantial levels. Specifically, an additional tax penalty was imposed upon businesses who refused to issue credit card slips or issued a credit slip inconsistent with the details of the transaction and which has been applied to their sales created after July 1, 2007. In the event of a clear refusal, an additional tax penalty equivalent to 5% of the refusal amount, whereas in the case of issuance of a credit card slip which carries false information regarding the transaction, an additional tax penalty equivalent to 5% of the difference between the actual payment and the amount carried on the credit card slip. If the transaction amount is less than 5,000 won, 5,000 won is used as a minimum base. To create a synergy effect of this scheme which is to be applied to all credit card network participants, in conjunction with the existing credit card participant designation scheme, effective as of January 1, 2008, the government ordered that this provision be applied to only whom meet the eligibility requirements for credit card network participants.[6] This action aims to exclude small businesses from administrative sanctions such as additional tax penalty if they adopt government policies in advance. This ensures that immediate acceptance of government policy may not work against their interests, relative to other business owners.

Furthermore, beginning on January 1, 2008, if a credit card network participants refused to accept credit card or issued a credit card slip carrying false information regarding the transaction affected, that company will be excluded from eligibility for applying the "simple expense rates[7]"[8], in addition to exclusion from various tax benefits including special tax relief/exemption for venture enterprises and special tax relief/exemption for small and medium-sized businesses[9]. This policy aimed to prevent a situation in which businesses are tempted to avoid use of the credit card for tax evasion purposes even though transparent foundation in business transactions is being established.

2) Watchdog rewards program for credit card transactions[10]

With the objective to make public the sources of taxable income, beginning on July 1, 2007, the 'Watchdog Rewards Scheme' was launched. Under the scheme, if a person reported an incident of refusal to accept a credit card or issuance of slip carrying false information regarding the pertinent transaction, upon verification of the facts reported the person was entitled to a reward amounting to 50,000 won per transaction reported

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[6] Clause (11) under Article 76 of the Corporation Tax Act; clause (10) under Article 81 of the Income Tax Act.

[7] For a small businesses, NTS allows tax filing using simple expense rate where the businesses need not to prepare all cost related documents.

[8] Clause (7) under Article 143 of the Enforcement Decree of the Income Tax Act.

[9] Clause (4) (item 3) under Article 128 of the Special Tax Treatment Control Act.

[10] Clause (1) (item3) under Article 84-2 of the Basic Law for National Taxes; Clause (4) under Article 65-4 of the Enforcement Decree of the said Act.

(maximum 2 million for a year). However, the majority of the reported incidents consisted of refusal to accept a credit card on small amount transactions reported by so-called professional watchdogs. For this reason the outcome of the scheme was not so satisfactory and this caused significant amount of complaints by small and micro-businesses. In an effort to settle this problem, the government implemented the Amendment to the enforcement decree of “Framework act on National Taxes” under which such reporters were entitled to a reward amounting to 20% of the amount reported, effective as of February 6, 2009. As outlined in the following table regarding the revised reward payment criteria, in general the amount of reward shall be equivalent to 20% of the amount reported. If the amount of reward turns out to be 10,000 won or less, a reward of 10,000 won will be paid, with the ceiling of 50,000 won per transaction, and 2 million won per person per year which remained unchanged.

Table 7. Watchdog rewards program

Amount reported[1)]	Rewards payable
5,000~50,000 won	10,000 won
50,000~2,500,000 won	20% of the amount reported
More than 2,500,000 won	50,000 won

Notes: 1) Refused amount or the difference between false information and real purchase.

2) A transaction amount of less than 5,000 won shall be excluded from the scheme

3) Tax penalties on denial of cash receipt system

Beginning on July 1, 2007, if an eligible cash receipt network participant fails to become a participant within a prescribed time period, that firm shall be penalized in a way that adds an amount equal to ‘5% of its reported sales for the pre-participation period’ to its final tax liability. The sales for the pre-participation period shall cover sales of an eligible cash receipt network participant for the period between the following day of the participation deadline and the preceding day to participation. This participation default penalty scheme aims to rapidly establish a solid foundation for transparent transactions.

Additional tax penalty applied to default in cash receipt participation

- Additional tax = The sales for the pre-participation period x 0.5%
- Sales (income) = Reported sales for the taxation year during the pre-participation period x the pre-participation period/365 (366 for a leap year),

  Provided that for the sales before December 31, 2008, 0.5% of the total sales for the taxation year during the pre-participation period will be applied.

In addition, if a participant defaulted in his/her obligation to issue a cash receipt or an issued receipt using false information, the penalty for 'default in cash receipt issuance' shall be 5% of the amount refused or the difference between true and false information (5,000 won penalty if the transaction amount or the differences are less than 5,000 won). Along with this sanction, effective on January 1, 2008, such violators will be excluded not only from the simple expense rates[11] which is available upon filing the total income tax return, but also from various tax relief/exemption schemes[12], including special tax relief/exemption for venture enterprises and special tax relief/exemption for small and medium-sized businesses.

4) Watchdog rewards program for cash receipt issuance[13]

The watchdog rewards program is also applied to the violators of the obligation to issue cash receipts. Effective as of July 1, 2007, if a cash receipts network participant refused to issue cash receipt or issued a cash receipt using false information, anyone who reports these to NTS has been given a reward of 50,000 won per incident reported. From 2009, the reward method changed to 20% of the amount reported to avoid abuse of the program.

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[11] Clause (7) under Article 143 of the Enforcement Decree of the Income Tax Act.

[12] Clause (3) (Item 3) under Article 128 of the Special Tax Treatment Control Act.

[13] Clause (1) (Item 4) under Article 84-2 of the Framework Act on National Taxes; Clause (4) under Article 65-4 of the said Act.

III. Scheme Promotion Efforts

1. The credit card income deduction scheme

The ‘credit card income deduction’ scheme was implemented in order to encourage salary income earners to use credit cards more actively to ultimately improve the transparency of owner-operators’ income. This would achieve equity within the context of taxation between salary income earners and owner-operators. To enhance such transparency through the use of credit cards, effective on 1994, the government implemented the VAT deduction scheme for sellers based on credit card sales, and this measure resulted in steady increase in the credit card share in private transactions.

Meanwhile, the government constantly reviewed the credit card income deduction scheme to seek ways of making public the sources of taxable income of owner-operators. After the financial crisis in 1997 which resulted in the worsening of income distribution, the government was encountered by the public’s strong demand for improving transparency of income, which then demonstrated relatively low levels of transparency. In such a situation, the strong support of civic groups helped the government come up with specific strategies in implementing the credit card income deduction system.

Specifically, as a means for encouraging user involvement, the government implemented two strategies at the same time: One of them involves removing any impediment on using credit cards from a consumers’ viewpoint, and the other strategy involves providing anticipated financial gains to credit card user. First, the government launched a system which made every business enterprise obliged to engage in credit card transactions in order to make sure that no consumers have difficulties in using a credit card. To minimize the resistance and cost burden of businesses that arise from the use of the scheme, the government loosened eligibility standard for VAT deduction which based on credit card sales. The standard is raised from under 300 million won to under 500 million won sales. Second, by inducing employees to use credit cards, the government attempted to induce owner-operators to disclose the source of taxable income. The main incentive was the credit card income deduction scheme. This would help settle the controversy regarding inequity within the context of taxation which has been continually addressed by interest parties.

Additionally, among other advanced countries, we cannot find any policies or experiences for active use of credit cards. In the case of the United States, credit card transactions account for only about 15% of its total economic transactions. And it provides low levels of user friendliness because such businesses as hospitals and restaurants register with different credit card companies. With the help of personal check system, the United States needs not to promote credit cards transactions for transparency.

To ensure convenience for consumers in using credit cards, the government forced, in consultation with the Financial Supervisory Service, to share credit card network of incumbent companies (launch in Sep. 1. 1999) under which consumers can use their credit cards when they make a payment to other credit card network participants. Prior to the launch of this system, the government undertook thorough review of the process of issuance and use of credit cards to ensure that the use of the system will help improve transparency in commercial transactions.

Meanwhile, there was the public's resistance to the use of the income deduction scheme based on credit card purchase since such policy may support credit card service companies. To reflect such concern in its policies, the government devoted its energies to reducing or minimizing credit card commission rates and associated costs as a way to reduce the resulting cost burden on consumers. First of all, in an attempt to reduce credit card commission fees, the government had a number of discussions with credit card service companies, based on the analysis of their profit structure, reinforcing its administrative guidance on reduction in credit card commission rates. Along with this action, the government managed to induce the public's interest and support for the policy by conducting campaigns targeting interest groups including the Credit Finance Association, the press and civilian organizations. In this respect, the government focused its efforts on the reduction of the costs associated with credit card memberships. For example, the government demanded credit card terminal providers to reduce their price.

Regarding specific policies in implementing the scheme, the government set 10% of one's total salary as the minimum limit for eligible income deduction and this was because when the system first began, the average transaction shares of credit cards already reached such a level. Also, by setting the maximum limit for income deductible as 3 million won, the government attempted to prevent huge loss in tax revenues as a result of the program.

In using credit cards, if the existing commission fees involve setting a higher price for the same product or service than that of the consumers would have paid with cash such practice might impede the active use of credit cards. Taking this problem into account, the government banned optional-pricing and implemented the watchdog rewards program which is intended to reward the reporters of an incident of refusal to accept a credit card

Such government efforts and strategies to improve transparency of the business income gained positive responses from the National Assembly during the legislation process of the policies. First of all, both of its objectives – supporting salary income earners and enhancing the transparency of business income – were well matched with the worsening economic situation subsequent to the 1997 crisis and the public's demand for equity within the context of taxation between salary income earners and self-employers. The government gained the public's consent relatively easily due to the given special economic circumstances, i.e. the 1997 financial crisis, but a careful approach is necessary if such programs are implemented in other countries. One good example is the unlimited access to credit card purchasing data by the National Tax Service in Korea. This practice may violate one's basic rights, privacy. If the government used the credit card purchasing information for other purposes or disclosed it to a third party, the government might end up facing serious resistance of the public to its policies in respect of the system. Obviously, the government should take extra precaution to keep such information strictly confidential.

2. The cash receipt income deduction scheme

After 1999, in line with its various strategies for encouraging active use of credit cards in economic transactions, the government managed to enhance, to a certain degree, transparency of business income of a prescribed size, yet the absolute figure of credit card sales was still low compared to cash-based transactions. Cash transactions in 2002 amounted to 234.6 trillion won, accounting for as high as 57.4% (234.6 trillion won) of the year's total civilian consumption expenditures. There was an overall negative response as to whether reduction in the relatively high rate of cash transactions to the total civilian consumption expenditures could continue through the existing government policies such as credit card income deduction system. This is because the relatively high rate of cash transactions is attributable to the size of self-employers which accounts for a relatively greater portion of total businesses (total employment) and they prefer cash transactions due to cost burdens such as credit card commission fees. Also, in the case of low turnover self-employers, the government felt it difficult to enforce acceptance of credit card solely by administrative guidance of the National Tax Service.

In addition to its concern over an inequity in taxation between salary income earners and self-employers, the government felt it was compelled to come up with a system under which cash transactions are discovered by a third party to improve equity in taxation and materialize the tax base of self-employers with high incomes. This led the government to make a decision to introduce (2005) the cash receipts income deduction scheme in 2003. The earlier model for this scheme was the Tax Card scheme which the National Tax Service considered as one of its strategies to complement credit cards while reducing businesses' cost burden - credit card commission fees - which was increasing with the growth of credit card purchases. Because this system was intended to be used exclusively by the NTS, it was crucial to come up with a cost effective way to operate it. Thereby, the government attempted to establish a cash receipts scheme by benchmarking know-how of private sectors. Prior to the launch of the scheme, the government had a number of discussions with relevant private companies – credit card service companies and VAN companies and made a decision on the addition of cash receipts function to the existing credit card terminals rather than the separate set-up of a terminal in workplaces. That is, under the newly devised system, VAN companies was to transmit online cash transaction information to the NTS the same way that it transmitted such information to credit card companies. This strategy significantly reduces the costs associated with the cash receipts system, giving small owner-operator businesses some merit.

The cash receipt system was created in September 2004, which was followed by a pilot operation for the period from November 16 to December 15 in the same year. Effective as of January 1, 2005, the system was put into use on a full scale by consumers. Along with this, to achieve early success in the operation of the system, the government presented legal grounds for the cash receipts scheme under which all civilian economic participants would be entitled to tax relief/exemption if they are eligible. First of all, the government revised Article 32-2 of the Value-Added Tax Act so that issued cash receipts can be included in the scope of tax concessions for credit card sales. This aims to reduce the additional tax burden faced by cash receipts network participants because of cash receipts issuance. 1% of issued cash receipts amounts can be deducted from the cash receipts participants' VAT. In addition, new provisions which govern tax relief/exemption for consumers and cash receipts service companies were added to Article 126-2 and 126-3 of the Special Tax Treatment Control Act. The Article 126-2 prescribed that consumers are entitled to income deduction based on cash receipts amounts, in the same manner allowing salary income earners to receive income deduction based on the amount that they paid using a credit card. Initially, the income deductible rate applied to the portion of cash receipts was 30% (the same rate applicable to the portion of debit card purchases), which is higher than the deductible rate applicable to credit card payments. However, in the review process of the National Congress, it was agreed that tax equities among payment means should be maintained including credit card and debit card, and a unified deductible rate of 20% was set to be applicable to cash receipts, credit card and debit card purchases. Article 126-3 prescribed that the deductible rate for VAT shall be based on the number of the set-ups of a cash receipts system by the cash receipts service companies in the workplace of cash receipts network participants, and the number of cash transactions processed via the terminal, with the aim to rapid establishment of cash receipts infrastructure.

Thereafter, the government has been constantly improving its policies and strategies supporting the cash receipts scheme, so that the scheme can be operated in cost efficient way to ultimately enhance transparency of income.

IV. Evaluations

There are hardly any research results or individual analysis discussing the outcome of the credit card and cash receipts income deduction schemes. This is because data are not available sufficiently enough to perform economic analysis on the choice of payment means in commercial transactions. Therefore, the outcome of the credit card and cash receipts income deduction schemes can be examined only through qualitative analysis.

The effect of the schemes can be verified by the magnitude of credit card and cash receipt transactions. Even though there is no clear demarcation between the non-cash transactions attributable to the schemes and the consequential change in transaction means that reflects trends in economic development, transactions with transparent means allows us to estimate the overall level of transparency in commercial trades. For the transaction details, the study relied on the Bank of Korea's data. The total credit card transactions amounted to 24.1 trillion won in 1997 and did not show much change in 1999(24.7 trillion won) due to the then economic crisis. With the inception of the income deduction scheme on a full scale, credit card transactions increased rapidly till 2002 when it amounted to 152.0 trillion won, which was followed by a fall to 141.8 trillion won in 2003 because of credit crunch. After 2004 credit card transactions continued to grow at a steady phase, although the growth rate is lower compared to early 2000. As of 2009, the amount of individual credit card transactions amount to 252.4 trillion won. Both its absolute size and its relative portion against total private consumption expenditures show almost similar trends of growth. The portion of credit card transactions relative to the total private consumption expenditures account for 8.9% in 1997 and increased to 37.2% in 2002, with a decrease to 33.4% in 2004. This was followed by a constant increase to as high as 51.2% in 2009.

It is concluded that such trend of significant increase in credit card transactions was greatly affected by the change in tax policies. This reveals that the credit card settled in as a means for transactions at an even faster pace through tax incentives, in addition to consequential trends in the growth of credit card uses attributable to the country's economic development.

Figure 2. Trends of credit card transactions

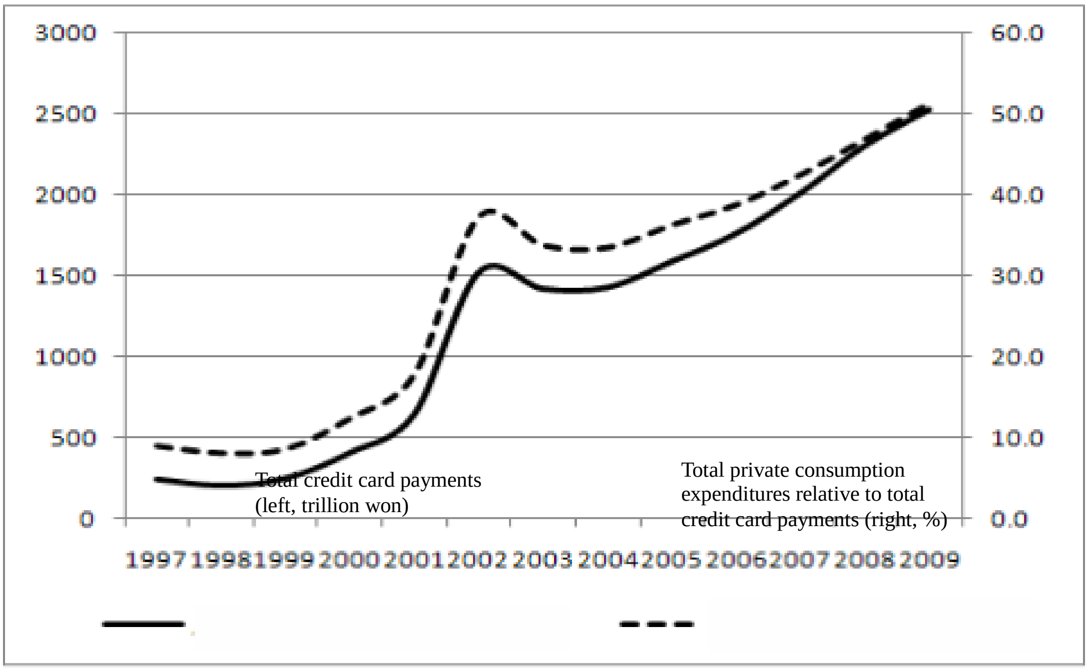

Table 8. Share of transparent transactions in private consumption expenditure

(100 million won, %)

Category		1997	1998	1999	2000	2001	2002	2003
Credit card transactions	A. CREFIA	-	-	-	778.7	1,342.3	1,740.5	1,705.3
	B. BOK	240.2	201.7	245.8	404.8	643.7	1.518.9	1.417.1
Debit cards		0.6	0.6	1.0	1.1	1.0	0.8	0.6
Check cards		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash receipts		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	C=(A+2+3+4)	0.6	0.6	1.0	779.8	1,343.3	1,741.3	1,705.9
	D=(B+2+3+4)	240.8	202.3	246.8	405.9	644.7	1,519.6	1,417.7
Private consumption expenditures (E)		2,713.4	2,521.1	2,899.6	3,303.9	3,642.5	4,087.2	4,201.0
The rate of credit card payments	C/E (CREFIA)	-	-	-	23.6	36.9	42.6	40.6
	D/E (BOK)	8.9	8.0	8.5	12.3	17.7	37.2	33.7
Category		2004	2005	2006	2007	2008	2009	
Credit card transactions	A. CREFIA	1,671.0	1,904.7	2,148.2	2,410.8	2,793.1	3,039.4	
	B. BOK	1,425.9	1,586.1	1,758.4	2,008.4	2,300.9	2,524.1	

Debit cards		0.7	1.7	1.1	0.8	0.6	0.4	
Check cards		26.4	77.7	123.3	188.3	268.0	364.6	
Cash receipts		0.0	18.6	30.6	50.3	61.6	68.8	
Total	C=(A+2+3+4)	1,698.1	2,002.7	2,303.3	2,650.1	3,123.2	3,473.2	
	D=(B+2+3+4)	1,453.0	1,684.1	1,913.4	2,247.7	2,631.1	2,957.9	
Private consumption expenditures (E)		4,350.6	4,654.3	4,949.2	5,302.6	5,616.3	5,774.0	
The rate of credit card payments	C/E (CREFIA)	39.0	43.0	46.5	50.0	55.6	60.2	
	D/E (BOK)	33.4	36.2	38.7	42.4	46.8	51.2	

Notes: The credit card transactions account for sales and installment plans of credit card payments by individual persons.

Sources: 1) Credit card transactions from the CREFIA (CREFIA, *Report on the situation of credit card companies*, 2009)

2) Credit card transactions from the BOK (BOK ECOS/payment/credit cards/credit card usage by individual consumers).

3) The amount paid through a debit card or check card. (BOK ECOS/payment/BIS statistics/Payment means-specific statistics/Debit card and check card usage by individual consumers).

4) Total cash receipts (Statistics Korea/e-National Indicators/ Cash receipts issuance/ Total cash receipts)

With the increased use of transaction means with high transparency, such as the credit card, the number of business income tax filers and their tax due also grew. The share of global income tax filers to total income earners, which hovered in the mid to high 30% prior to the financial crisis in 1990, increased rapidly from 1999 when the credit card deduction program was adopted, and in the early to mid 2000s, it still shows a continued increase. Since 2003, when there was a problem with excessive use of credit cards, it showed a relatively slower growth, but began to increase in greater strides again from 2006. The rapid increase of the ratio of global income tax filers in 2006 can be attributable to improvements in various tax administrations for the introduction of the earned income tax credit[14]. However, it appears to have been influenced through the

[14] The earned income tax credit is refundable tax credit for low income earners. The benefit is eligible for employees who earn less than 160 million won (household income) and support a child or more. The go vernment planned to launch of the scheme for 2007, but the scheme finally began in 2008. With

continued pursuit for transparency of tax bases.

Table. 9. Trends in global income tax returns

Taxation year	Potential Tax return filers (A)	Actual tax return filers (B)	Determined tax amount (C)	Determined tax amount per person	Rate of tax filing
	Person	Person	100 million won	(C/B, won)	(B/A, %)
1990	2,367,012	739,807	13,408.38	1,812,416	31.25
1991	2,593,388	827,764	16.110.32	1,946,246	31.92
1992	2,811,346	946,365	21,076.13	2,227,061	33.66
1993	3,165,119	1,138,204	26,700.18	2,345,817	35.96
1994	3,353,842	1,226,489	31,296.12	2,551,684	36.57
1995	3,507,003	1,356,606	34,780.45	2,563,784	38.68
1996	3,657,253	1,247,442	36,690.79	2,941,282	34.11
1997	3,437,818	1,299,442	36,898.42	2,839,559	37.80
1998	3,495,183	1,225,614	30,156.07	2,460,487	35.07
1999	3,407,662	1,342,152	35,578.19	2,650,832	39.39
2000	3,480,371	1,616,244	48,031.25	2,971,782	46.44
2001	3,808,476	1,782.369	55,372.59	3,106,685	46.80
2002	4,160,795	2,010,363	57,452.59	2,857,822	48.32
2003	4,227,354	2,114,527	62,886.63	2,974,028	50.02
2004	4,363,257	2,235,905	69,438.35	3,105,604	51.24
2005	4,369,881	2,279,497	74,371.91	3,262,646	52.16
2006	4,580,357	2,736,478	92,323.53	3,373,809	59.74
2007	4,913,387	3,074,419	112,775.13	3,668,177	62.57
2008	5,227,276	3,584,432	117,298.05	3,272,431	68.57

Sources: The National Tax Service, *National Tax Statistics* (the years involved)

Also for the determined global income tax amount, despite the continuous dropping of income tax rates[15] (1994, 1996, 2002, 2005), it is showing continued growth. From

the launch of the system, the government strengthened its tax policies to support low-income wor kers and it is concluded that such efforts have contributed to enhancing transparency of the inco me source of employers who hire such workers.

[15] The government implemented changes in its income tax brackets and income tax rates as follo

1998 to 2001 where there were no tax rate changes, the determined tax amount increased at the annual rate of 22.5%, from 3.0 trillion won to 5.5 trillion won. The average determined global income tax amount per person also showed 8.1% annual growth rate during the period, from 2.5 million won to 3.1 million won.

The rate of credit card network participants out of the designated, which serves as one of the indicators of the level of transparency in commercial transactions, rose significantly compared to July 1997 when the government implemented the mandatory participation policy. Such significant increase was found across all business types. Especially it showed an increase of 32%p for retail businesses which makes it difficult for a third party to find out their income due to their heavy reliance on direct transactions with end-users. In the case of the restaurant and accommodation sector, over 95% of the eligible participants have now become a credit card network participant with the active administrative guidance by the government.

Table 10. The number of Credit card network participants

(Unit: business, %)

Category	Total		Retail		Restaurant & Accommodation		Services		Others	
	July 1999	Dec. 2008	July 1999	Dec. 2008	July 1999	Dec. 2008	July 1999[1]	Dec. 2008	July 1999	Dec. 2008
Designated business as eligible	31,554	880,298	10,907	360,735	901	262,518	1,595	252,704	2,537	4,341
Participants	23,100	745,126	5,333	291,489	713	249,564	1,070	201,064	1,719	3,027
The rate of participation	73.2	84.6	48.9	80.8	79.1	95.1	67.1	79.6	67.8	69.7

Notes: 1) The figure is only for after-school academies.

Sources: The National Tax Service, '*Strategies for increasing the size of credit card participants*' (Phase 2, 1999), p1, 16.9.1999; *National Tax Statistics* (2009 & 2010)

ws: 1989~1990 (8 tax brackets, 5%~50%), 1991~1992 (5 tax brackets, 5%~50%), 1993 (6 tax brackets, 5%~50%), 1994~1995 (6 tax brackets, 5%~45%), 1996~2001 (4 tax brackets, 10%~50%), 2002~2004 (4 tax brackets, 9%~36%), 2005~2007 (4 tax brackets, 8%~35%)

Today, the cash receipts scheme which began in 2005 also shows a significant increase in the number of network participants compared to the early stage of its use. An interesting point is that its 2008 participation rate was over 95% across all business sectors, indicating a higher rate than that of the credit card scheme in the same year. Such a high rate is attributable to the NTS's administrative efforts focused on encouraging active user participation in the cash receipts scheme. This is because, unlike the credit card market which is operated by private markets, the cash receipts scheme is operated by the NTS for taxation purposes.

Table 11. The number of cash receipt network participants

(Unit: business, %)

Category	Total		Retail		Restaurant & Accommodation		Services		Others	
	The end of 2006	The end of 2008	The end of 2006	The end of 2008	The end of 2006	The end of 2008	The end of 2006	The end of 2008	The end of 2006	The end of 2008
Designated business as eligible	651,115	880,298	267,273	360,735	195,550	262,518	183,725	252,704	4,567	4,341
Participants	548,541	860,906	214,884	352,496	182,308	261,064	148,883	243,274	2,466	4,072
The rate of participation	84.2	97.8	80.4	97.7	93.2	99.4	81.0	96.3	54.0	93.8

Sources: The National Tax Service, *National Tax Statistics* (2009 and 2010)

The financial cost of the schemes also increased greatly together with the expanded application of the policies. The tax revenue loss from income deductions is at around 1.8 trillion won as of 2009. Tax revenue loss greatly increased with the development of the program, and in 2000 during which it was first implemented, it was at 34.6 billion won and skyrocketed to 830.8 billion won in 2003. After maintaining a soft growth since then, its growth is once again speeding up after 2007.

The revenue loss of the support policies aside from income deductions based on credit cards and cash receipts is also quite considerable. In particular, the revenue loss from VAT deductions for business owners has swollen to a 1.1 trillion won level in 2008. The revenue loss from other policy is not very large, 37.4 billion won as of 2008. Therefore in the future, efforts to improve efficiency of overall operation of the VAT deduction policy will also be needed.

Table 12. Revenue loss from credit card and cash receipt deduction schemes

(100 million won)

Year	Amount	Year	Amount
2000	346	2005	9,812
2001	2,027	2006	10,465
2002	6,223	2007	12,506
2003	8,308	2008	15,171
2004	8,966	2009	18,460

Sources: The Ministry of Strategy and Finance, *Tax Expenditure Reporting* (for the years involved)

Table 13. Revenue loss by tax benefit scheme

(100 million won)

	2008	2009 (tentative)
Income deduction based on credit card(cash receipt) payments	15,171	18,460
Other tax credit for business income	386	374
VAT deduction based on credit card sales	8,451	10,559
Total	24,008	29,393

Sources: The Ministry of Strategy and Finance, *Tax Expenditure Reporting* (2009)

V. Policy Recommendations

The success of the implementation of the income deduction scheme associated with credit card and cash payment receipts can be summarized into two ways. One of them strives to establish a favorable environment for the use of credit cards and cash receipts. Even prior to the inception of the scheme, the government devoted its energies to improving the existing foundation. After the scheme began, the government made it mandatory for businesses of a prescribed size to enroll in the credit card network while applying various standards based on business types. This provided the basis for enabling many businesses to accept credit cards and cash receipts in commercial transactions.

The other strategy concerns the enhancement of the public's acceptance of the scheme by combining various policies and strategies related thereto. Apart from the provision of an incentive for the buyers if they use credit cards and cash receipts in transactions, the government has succeeded to raise the level of the public's acceptance of the scheme by granting the sellers tax allowances which can be offset against an increase in transaction costs and tax burden. The government has been able to improve the overall level of acceptance of interested parties of the scheme by operating lottery programs intended for those who find it difficult to meet the minimum consumption requirement set from an expense point of view (i.e. at least 10% of their salary). In addition, to prevent intentional avoidance of the scheme, the government induced taxpayers to comply with the scheme in conjunction with various administrative sanctions including tax penalties and watchdog rewards program.

Therefore, when this income deduction scheme is reinstated, taking into account the two attempted strategies stated above, it is necessary to expand and complement the existing foundation for credit card usage, before and after its inception. In addition, it is essential to provide economic incentives for any interested party including transaction parties, in conjunction with administrative sanctions that may be enforced against violators of the scheme. Another consideration in introducing the scheme relates to the opportunity to create supplementary schemes to enable more taxpayers to use the scheme.

Meanwhile, it is crucial to look at socio-cultural environments. If the public cares more about privacy, the collection of transaction information by tax authorities would not be welcomed. Strong desire to protect privacy would make it difficult to implement the scheme. Such an institutional environment can be improved over time through government campaigns, yet it is crucial to examine the likelihood of such rejection and the social and cultural context in which such a dilemma may have been embedded.

Besides, the government should have a clear understanding of its costs for the operation of such income deduction schemes. This is crucial not only installment stage but also operation stage for necessary reforms. In general, it is extremely difficult to cut the tax relief (exemption) due to the strong opposition of interest groups. This problem may also occur in Korea, and thus it is essential to formulate a clear purpose on the reasons for introducing the credit card and cash receipts income deduction schemes.

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