

## Improvement Plan for Cash Receipt System

Ki Beom Kim<sup>1</sup>, Hyung Rok Woo<sup>2</sup>

<sup>1</sup>Associate Professor, Department of Business Administration, Mokpo National University, Korea  
[kibum2005@hanmail.net](mailto:kibum2005@hanmail.net)

<sup>2</sup> Assistant Professor, Department of Business Administration, Mokpo National University, Korea  
[hrwoo@mokpo.ac.kr](mailto:hrwoo@mokpo.ac.kr) (corresponding author)

### *Abstract*

*Considering the current situation where cash transactions account for 51.5% of private consumption expenditure, it is very important to secure a tax base by exposing business operators' cash transactions. In the September 2011 national audit, it was pointed out that although a significant part of the investment amount of businesses (VAN operators, etc.) related to the issuance of cash receipts has been recovered, they are still supported through the state tax. At this point in time when a significant amount of the initial investment has been recovered, it is necessary to study a new way to support business operators through methods other than the tax credit method. This study proposes various methods to improve the current cash receipt system and describes the advantages and disadvantages of each method. The most important thing for the improvement of the cash receipt system is that the issuance of cash receipts should be beneficial to business operators. As a result of this study, the most desirable improvement method is to provide differential compensation for the discriminatory cost because the cost is different for each cash receipt operator. For this purpose, we analyze the best way to improve the cash receipt system is a tax credit method and a tax credit for maintenance costs.*

**Keywords:** Cash receipts system, Tax credit method, Exposure to cash sales, Exposure to tax base

### 1. Introduction

The National Tax Service has been implementing the cash receipt system (here after, 'CRS') since 2005. When cash is received by supplying goods or services, the business operator issues a cash receipt with the date and time of the transaction and amount, etc. to the person receiving the goods or services (Article 160-2 (2) of the Income Tax Act, Kim, 2022) [1].

Businesses are obliged to issue cash receipts for transactions of KRW 5,000 or more per transaction until June 2008, and KRW 1 or more per transaction after July 2008. Consumers who have received a cash receipt must register as a member at Hometax of the National Tax Service and register their card number and mobile phone number to receive income deduction (Article 210-1 (4) of the Value Added Tax Act, Park, 2022) [2].

The CRS was implemented by the Roh Moo-hyun administration (participating government) to 'cultivate

---

Manuscript Received: July. 17, 2022 / Revised: July. 20, 2022 / Accepted: July. 22, 2022

Corresponding Author: [hrwoo@mokpo.ac.kr](mailto:hrwoo@mokpo.ac.kr)

Tel: +82-61-450-2610, Fax: +82-61-450-6466

Assistant Professor, Department of Business Administration, Mokpo National University, Korea

the self-employed taxpayer'. It was implemented from January 1, 2005 to increase tax by fostering cash transactions at a time when the proportion of cash transactions by business operators accounted for 51.5% of private consumption expenditures. Businesses who are general taxpayers under the Value Added Tax Act that issue cash receipts from 2019 can receive a tax credit of 1% of the issued amount of cash receipts. Under the Value Added Tax Act, simplified taxpayers can deduct 2% of the issued amount from the amount of tax paid. However, the tax credit is limited to KRW 5 million per year. In addition, if a sole proprietor issues a cash receipt for a transaction amount of less than 5,000 won using the telephone network, 20 won per case is deducted from the amount of tax paid. Meanwhile, residents with wage and salary income, excluding daily workers, can receive income deductions for the amount in which the annual total of the amount used, such as cash receipts, exceeds 25% of the total salary. The limit of income deduction differs depending on the total amount of wages in the relevant tax year. If the total salary is 70 million won or less, the lesser or equal of 20% of the total salary or 3 million won shall be deducted as the limit. If it exceeds the limit, the deduction limit is 2 million won per year.

In a national audit in September 2011, it was pointed out that the value-added tax credit for issuance of cash receipts is rapidly increasing from KRW 13.6 billion in 2006 to KRW 96.4 billion in 2010. It was pointed out that even though a significant part of the investment amount of businesses (VAN operators, etc.) related to the issuance of cash receipts has been recovered, they are still supported through the state tax. In particular, huge debates are being offered to large franchisees, which correspond to large corporations, and as a result, relatively small-scale franchisees are suffering damage. Therefore, it is necessary to understand the appropriateness of the cost of issuing cash receipts at the time when a significant amount of the initial investment cost has been recovered, and it is necessary to study ways to support business operators through methods other than the tax credit method. The scope of this study is limited to VAN operators for cash receipt operators. The subsidy paid for the installation of the cash receipt issuance device is excluded from the scope of the study. Since the CRS has been in effect for more than 7 years, the analysis of the initial system development cost is excluded. The CRS project costs are limited to slip costs, computerized processing costs, labor costs, and other costs.

## **2. Tax Credit and Approval Structure for Cash Receipt Business Operators**

When a consumer presents a card (cash receipt card, credit card, credit card, etc.) or mobile phone number along with cash, the business that supplies goods or services issues a cash receipt through the cash receipt issuance device and records the details of each cash payment. The system to notify the National Tax Service is the CRS. Cash receipts are issued for cash settlements of KRW 1 or more per transaction. Before July 1, 2008, cash receipts could only be issued for cash payments of 5,000 won or more. The CRS was implemented for the purpose of securing tax equity and realizing tax justice by nurturing tax bases for cash-consuming industries, etc. to secure tax revenue. The tax credit given to VAN operators is a tax benefit given to compensate for investment costs (network construction and merchant terminal installation, etc.) and to compensate for the cost of issuing cash receipts. The amount of deduction according to the number of installations of cash receipt issuance devices can be changed by +30% based on KRW 15,000 per installation. The deduction amount according to the number of cash receipt payments can be changed by +30% based on KRW 22 per payment (KRW 14 for online issuance).

Cash receipt approval transactions and credit card payment transactions have different profit and loss structures for each party. Cash receipt business (mostly the same as credit card VAN business) performs approval business through existing communication lines (or additional investment) for cash receipt transactions, and income is subsidized in the form of tax credits for each approval and installation (credit). For credit card transactions, a fee of about 150 won per transaction is charged from the credit card company).

Meanwhile, Botosan and Stanford (2005) [3] are representative of the empirical research on the relationship between segment disclosure and proprietary information cost. In other words, according to the study, it is reported that management of companies with segments belonging to less competitive industries tend to limit the exposure of proprietary information in order to sustain excess profits in that segment. Berger and Hann (2002) [4], Berger and Hann (2007) [5] verified whether the information environment of analysts was significantly affected by the introduction of a more strengthened segment disclosure rule (SFAS No. 131).

### 3. Improvement Plan for Cash Receipt System (CRS)

In order to maintain the CRS, economic incentives should be given only to cash receipt operators. In accordance with these principles, measures to improve the tax credit system will be possible as follows. Since the cost is different for each cash receipt operator, a differential compensation should be given for the differential cost. According to this purpose, a method that can be implemented is a method of providing a tax credit for investment and a method of providing a tax credit for maintenance costs. In other words, the deduction amount for each number of approvals and installations should be adjusted in consideration of the cost. In order to apply this, first, it is necessary to induce cash receipt operators to separate and account for these expenses. In other words, the cash receipt business should report corporate tax by dividing the credit card payment section and the receipt approval section. Instead of applying the existing standardized tax credit, two methods are applied simultaneously: an investment tax credit and a tax credit based on maintenance costs. In other ways, if the issued amount of the cash receipt is low, the VAN operator is given the right to refuse to purchase the cash receipt. Prior to July 1, 2008, only cash payments of KRW 5,000 or more could issue a cash receipt. We want to go back this way (Lee, 2017) [6].

To run the cash receipt business, VAN operators and large merchants are designated as special parties and are obliged to submit their transaction details to the National Tax Service. If commissions are excessively paid for large franchisees compared to small franchisees, a tax investigation will be conducted on both companies. The advantages of the direct tax deduction method are: Prior to the implementation of the CRS system, business operators tended to avoid tax burdens such as value-added tax and income tax by omitting cash sales. However, with the implementation of the CRS, the burden of VAT and income tax on business operators increased. In order to reduce tax resistance to the CRS, which was implemented bluntly in a situation where business operators have low tax awareness, and to alleviate the sudden increase in tax burden, it is essential to reduce the tax burden through tax credits for cash receipt franchisees at the initial stage of implementation of the CRS to be. Tax support for cash receipt franchisees is not just tax support for activating CRS, but only a means to alleviate the increase in tax burden caused by the CRS (Koh, 1996) [7]

The disadvantages of the direct tax deduction method are: Cash receipt merchants are already receiving a value-added tax credit (up to 7 million won per year) of 1.3% of the approved amount for cash receipt approved transactions. There is no economic loss due to approved transactions because there is no additional fee charged for approved transactions. Cash receipt merchants only bear a commission of 2-4% of the payment amount when customers pay by credit card. These fees eventually become income for credit card companies, which is a payment system that causes inequality among business operators. Cash receipt franchisees are more likely to evade value-added tax and income tax due to omission of cash sales than tax credit, so the effect of maximizing tax transparency by tax credit is highly likely to fall. Since the subject of the cash receipt issuance is the consumer, that is, the person receiving the supply, tax support through tax credit to the business operator who is the supplier who issues the cash receipt is not very helpful in activating the CRS. In principle, the cash receipt tax credit compensates for the expenses incurred by the cash receipt operator for cash approval, so it is essential to the operation of the system to provide compensation to the operator who issues the cash receipt.

The advantages of the method of excluding industries to which the tax base is automatically exposed are as follows. In industries where the tax base is automatically exposed (e.g., health benefits out of hospital expenses, postal fees at the post office, profit-making businesses of public institutions, workplaces with well-established POS systems, etc.) Few. Therefore, if cash receipt approval is systematically excluded for these industries, the efficiency of resource allocation will be maximized. Even if the tax source is automatically exposed, if the cash receipt transaction is approved in these industries, unnecessary activities such as approval, notification, and printing will occur, resulting in inefficiency in resource allocation.

The disadvantages of the method of excluding industries to which the tax base is automatically exposed are as follows. Educational guidance for franchisees, cash receipt business operators, and consumers should be conducted in advance regarding the exclusion of certain industries and transactions (Jun and Kim, 2018) [8]. Specifically, in the case of hospitals, it is necessary to educate hospital officials that cash receipts are subject to issuance only for non-insured health insurance, excluding health insurance co-payments. For this, active cooperation of hospitals will be required. As mentioned above, applying the CRS to industries where cash transactions are automatically exposed is an abuse of the system. However, it is necessary to actively develop a system that detects and verifies omissions in sales in industries where cash transactions are not exposed to increase the number of industries that are not subject to the CRS (Lee, 2017) [6]. The proportion of industries that are automatically exposed to cash transactions is not high. If a request for approval work is performed without applying a tax credit, there may be a problem in that the business operator has to bear the cost of the approval work. Also, since the tax credit is, in principle, implemented to compensate for the cost of cash approval by a cash receipt business operator, it is also not fair to apply the tax credit to an industry where the tax base is automatically exposed.

The advantages of applying the tax deduction amount differently depending on the industry are as follows. For businesses with a lot of cash omissions (e.g., professional self-employment and businesses that mainly conduct small transactions with consumers), if support such as tax credit is differentially increased for both franchisees and consumers, consumers will actively use cash receipts for cash transactions. The attraction effect will increase. In the case of franchisees, the tax burden caused by a rapid increase in sales can be reduced, thereby increasing tax compliance.

The disadvantages of the method of applying the tax credit differentially depending on the industry are as follows. The amount of tax credit is uniform for each industry, so a business operator belonging to an industry that benefits from a high tax credit amount and not omitting sales will receive benefits without extra effort (Koh, 1996) [7]. Even if they belong to the same industry, it is highly likely that the ratio of cash sales and the degree of sales omission will be different. Ignoring this reality, uniformizing the amount of tax deductions for each industry is not desirable in terms of equity. In addition, the related laws and regulations are too fragmented and complicated, which inevitably increases the difficulty of the taxpayer's tax return (Kim, 2009) [9].

The advantages of excluding a certain amount from tax credit are as follows. The purpose of the CRS is to train business owners' income sources. Mandating approval work for amounts less than 5,000 won per approval won't do much to increase taxes. In addition, due to the various costs incurred due to the compulsory performance of the approval work, the cost burden on the business operator only increases, and there is a high possibility that the adverse effect will occur. Therefore, if tax deduction benefits are excluded when the amount of payment is small, inefficient approval transaction tasks (network use, slip printing, data storage, transmission) will be reduced, enabling efficient resource allocation. The issuance of cash receipts was excluded for transactions of less than KRW 5,000 in the past (Koh, and Song, 2018) [10]. This was because the tax authorities already knew that there would be no economic benefit to obliging the approval of cash receipts for micropayments. Since the micropayment ratio is over 40%, if the tax credit for micropayments is

eliminated, the amount of support is highly likely to be reduced by more than half. In addition, it is highly likely to have a positive effect as it can put a brake on rebate practices between large merchants and cash receipt operators.

The disadvantages of the method of excluding a certain amount of money from tax credit are as follows. Stable tax income will be generated only when the tax base of business operators is widely nurtured. However, if the business of cash receipt approval is not obligated and tax deductions are not provided at the same time, it will have the effect of providing incentives to omission of cash sales to these business operators. A plan should be devised to solve the problem of the difference in the degree of exposure of the tax base depending on whether or not the approval of cash receipts is mandatory. In addition, it is necessary to simplify the system in order to alleviate the business burden of business operators due to the implementation of the CRS. The problem of the current CRS, where a large amount of small payments gives cash receipt operators a large unearned income, needs to be improved. If we allow refusal of small-amount approvals to block this, consumers will reduce small purchases and make large payments at once. In this case, the profits of large franchisees will increase and the income of small franchisees will be lowered. In addition, if only approval work is requested without tax credit benefits, the current system that differentiates tax benefits according to the approved amount should be supplemented because the cost does not vary according to the approved amount.

#### 4. Conclusion

The purpose of the CRS is to train business owners' income sources. It is necessary to develop a system that verifies omissions in sales in industries where cash transactions are not exposed to increase the number of industries that are not subject to the CRS. If commissions are excessively paid for large franchisees compared to small franchisees, a tax investigation will be conducted on both companies.

It is very important to train the tax base by exposing the cash sales of individual entrepreneurs through the CRS. To this end, we emphasized that CRS must have an inherent institutional mechanism to induce business operators to issue cash receipts. Based on these principles, the fundamental way to improve the current CRS is to induce business operators to issue cash receipts through tax credits. The cost of issuing a cash receipt will vary by cash receipt operator. Differential compensation for discriminatory costs maximizes the efficiency of resource allocation. Various methods for this should be suggested in future studies.

#### References

- [1] S. Kim, *Income Tax Law*, Sam-II Informine, pp. 160, 2022.
- [2] S. Park, *Value added Tax Law*, Sam-II Informine, pp. 98, 2022.  
DOI: [https://doi.org/10.1016/0165-4101\(83\)90011-3](https://doi.org/10.1016/0165-4101(83)90011-3)
- [3] C. A. Botosan and M. Stanford, "Managers' motives to withhold segment disclosures and the effect of SFAS No. 131 on Analysts' Information environment," *Accounting Review*, Vol. 80, pp. 751–771, 2005.  
DOI: <https://doi.org/10.2308/accr.2005.80.3.751>
- [4] P. Berger and R. Hann, "Segment disclosures, proprietary costs, and the market for corporate control," Working paper, University of Chicago and University of Southern California. pp. 69, December, 2002.  
DOI: <http://dx.doi.org/10.2139/ssrn.357780>
- [5] P. Berger and R. Hann, "Segment profitability and the proprietary and agency costs of disclosure," *The accounting review*, Vol. 82, No. 4, pp. 869-906, 2007.  
DOI : <http://dx.doi.org/10.2139/ssrn.436740>
- [6] N. Lee, "A study on the effect of introducing the cash receipt system," *Finance Journal*, Vol. 10, No. 4, pp. 54–89, 2017.
- [7] E. Koh, "A study on the economic feasibility of the cash receipt system," *Journal of Accounting Research*, Vol.

34, No. 2, pp. 261-279, 1996.

DOI: <https://doi.org/10.2307/2491502>

- [8] H.J. Jun and T.S. Kim, "Economic spillover effects of e-receipts in South Korea," *Journal of Information Technology Services*, Vol. 17, No. 2, pp. 35-47. 2018.  
DOI: <https://doi.org/10.9716/KITS.2018.17.2.035>
- [9] Y. Kim, "A Study on the problem of cash receipt system in Tax Law," *Tax and Accounting Journal*, Vol. 10, No. 1, pp. 128-167, 2009.
- [10] E. Koh and H. Song, "The Effect of the cash receipt system on preventing tax evasion from consumers' perspective (in Korean)," *Economic Analysis (Quarterly)*, *Economic Research Institute, Bank of Korea*, Vol. 24, No. 1, pp. 99-126, March. 2018