

2010 Modularization of Korea's Development Experience: Innovations in Taxation Policy

2011

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Innovations in Taxation Policy**

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<u>Project Title</u>	2010 Modularization of Korea's Development Experience: Innovations in Taxation Policy
<u>Prepared by</u>	Korea Development Institute (KDI)
<u>Supported by</u>	Ministry of Strategy and Finance (MOSF), Republic of Korea
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<u>English Editor</u>	Kwang Sung Kim, Freelance Editor

Government Publications Registration Number 11-1051000-000139-01

ISBN 978-89-8063-582-5 94320

ISBN 978-89-8063-573-3(SET 10)

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Knowledge Sharing Program

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Preface

In the 21st century, knowledge is one of the key determinants of a country's socio-economic development. In recognition of this fact, the Ministry of Strategy and Finance (MOSF) and the Korea Development Institute (KDI) launched Knowledge Sharing Program (KSP) in 2004. The KSP aims to share Korea's development experience and knowledge to assist socio-economic development of partner countries.

The KSP is comprised of three parts: 1) the systemization and modularization of Korea's development experiences into case studies, 2) policy consultation through knowledge sharing with partner countries, and 3) joint consulting with international organizations. The systemization and modularization of Korea's development experience researches and documents Korea's successful policy experiences, such as the 'Five-Year Economic Development Plan' and 'Saemaul Undong (New Village Movement).' The policy topics are 'systemized' in terms of the background, implementation and outcome, and then, presented as case studies in order to achieve a complete understanding of the actual policies. These systemized policy case studies are further 'modularized' by sector so they can be utilized as concrete examples by partner countries to meet their interests in specific institutions, organizations or projects. For example, Korea's 'Export Promotion Policy' has been prepared as a systemized case study while 'the Establishment of the Export-Import Bank' has been modularized to provide a specific example of Korea's export promotion experience in export financing. The modularization of Korea's development experience traces back to a policy's inception and recapitulates the rationale for its introduction; its main content; and its implementation mechanism. The case studies also evaluate a policy's outcome and draw insights with a global comparative perspective. These case studies include literature reviews, surveys and in-depth interviews with the policy practitioners and experts who participated in the implementation process.

The systemization of Korea's development experience was initiated in 2007 and finished in 2009. Under the new Modularization Project, launched in 2010, the plan has been set out to modularize 100 case studies by sectors and topics in three years.

I would like to take this opportunity to express my sincere gratitude to Project Manager, Dr. Wonhyuk Lim, and all the Korean experts for their immense efforts in successfully completing the '2010 Modularization of Korea's Development Experience.' I am also grateful to Managing Director, Dr. Kwang-Eon Sul, and Program Officer, Ms. Ja-Kyung Hong, the members of the Center for International Development, KDI, for their hard work and dedication to this Program.

I earnestly hope that the final research results will be fully utilized in assisting the development partner countries in the near future.

Oh-Seok Hyun
President
Korea Development Institute

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The Credit Card and Cash Receipts Income Deduction Scheme

1. Background of the Scheme
2. Description of the Scheme
3. Scheme Promotion Procedures
4. Evaluations
5. Policy Recommendations

The Credit Card and Cash Receipts Income Deduction Scheme

Byung-Mok Jeon (Korea Institute of Public Finance(KIPF))

<Summary>

The Korean government has been striving to enhance transparency in all commercial transactions with the objective of achieving equity within the context of taxation. One of the keys to accomplishing such an objective is the use of an income tax deduction scheme calculated using receipts from credit card and cash transactions. Under this scheme, if a taxpayer made a payment via credit card and/or cash, that individual would be entitled to a tax deduction of a prescribed percentage of the purchased amount from their taxable income base. This scheme aims to encourage the taxpayers to actively use credit cards and cash receipts, which allow the disclosure of their transaction history to a third party, in the course of their economic activities. The ultimate goal of this scheme is to enhance transparency of income derived by businesses which provide a product or service directly to the 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. Firstly, this scheme strives to establish a solid foundation supportive of the active use of credit cards and cash receipts. Even prior to the introduction of the scheme, the government devoted its energies to encourage the users to actively participate. At the launch of the scheme, the government made the scheme mandatory for the businesses of a prescribed size while pursuing the acceptance from the public with tax-based policies and various sub-mechanisms to suit different types of businesses. The outcomes of these two strategies provided the basis for other businesses to adopt the use of receipts for both the credit card and cash in the commercial transactions. The other strategy concerns with the enhancement of the public's acceptance of the scheme by combining various policies and strategies related thereto. In addition to the incentives provided to the buyers, tax reduction was offered to the suppliers to offset the

increased transaction costs and tax burden. The lottery programs simultaneously operated for those who find it difficult to meet the minimum consumption requirement (i.e. at least 10% of their total salary), preset on the expense point of view, promoted more participation in general. In addition, to prevent intentional avoidance of the scheme, the government has implemented various administrative sanctions to strengthen compliance by taxpayers including the ‘additional tax penalty program’ and the ‘reporter rewards program’.

Therefore, so as to newly introduce this income deduction scheme, taking into account the two aforementioned factors, it is necessary to expand the infrastructure required in utilizing the major payment methods both before and after the implementation. In addition, appropriate economic incentives for both transaction parties in conjunction with administrative sanctions against the violators are also required. Another consideration in introducing the scheme relates to the opportunity to create supplementary schemes to enable more taxpayers to use the scheme.

1. Background of the Scheme

Since the 1997 financial crisis, Korea needed a credible and systematic tool to deal with its ever worsening financial situation caused by the government spending on the financial reform and the reduced tax revenues. Such needs for the policy also served as a fundamental solution for the long-sought tax equity between the wage earners and the self-employers. The rationale was that unless the government tackles the issue of equity in the context of taxation on various types of businesses, it would be difficult to build the trust on the government policies designed upon the taxable income, such as general taxations and the governmental support.

Specifically, as a consequence of the 1997 financial crisis, the public sector’s consolidated balance to GDP ratio was -3.9% and the operational budget balance to GDP ratio was -5.1% in 1998 (a serious budget deficit) as presented below. Thus, public concern about the government’s financial turmoil surged in the wake of the crisis. The government had never suffered such a level of financial deficit before. During the pre-1997 financial crisis period, the Korean economy had been financially stable under the planned spending principle. In fact, the average balance of consolidated public sector to GDP ratio during the three years before the financial crisis (1994~1996) was 0.3%. One could imagine the degree of shock brought on by the country’s ever-worsening budget deficit resulting from the 1997 financial crisis.

Table 1-1 | Korea's Financial Situation when the Scheme Began

	1994	1995	1996	1997	1998	1999
Consolidated public sector balance	1.4	1.2	1.1	-7	18.8	-13.1
(to GDP ratio as %)	0.4	0.3	0.2	-1.4	-3.9	-2.5
Operational budget balance	-1.4	-2.2	-4.2	-12.8	-24.9	-20.4
(to GDP ratio as %)	-0.4	-0.6	-0.9	-2.6	-5.1	-3.9

Sources: e-National Indicators.

The need to expand the financial income basis and to improve the ineffective income monitoring system for the self-employers demanded for more aggressive policy tools.

Tax authorities had established the taxation data infrastructure to monitor the accuracy of the profit report made by the self-employers with the VAT bills and receipts for the business transactions and the payment receipts for the consumption transactions. The reality was unlike the exchange of VAT statements for the business transaction that has become one of the business customs; the exchange of payment receipts for the consumption transaction was not widely practiced in Korea despite of the tremendous efforts made by the tax authorities¹⁾ since the introduction of the VAT scheme in July 1977. Furthermore, the efforts to introduce other means to enhance the transparency of transactions including personal checks have not been fruitful. For this reason, they deemed it essential to implement a new policy approaches which accommodated diverse needs.

In this regard, the tax authorities decided to secure the credit cards, which the financial institutions began to distribute in the beginning of the 1980s, as the taxation documents and an alternative to the cash transactions. The government further implemented policies to encourage the usage of the credit cards through systematic incentives and regulations.

For this purpose, the tax authorities first amended the Enforcement Decree of the Income Tax Act and the Enforcement Decree of the Corporate Tax Law in October 1984 to encourage the credit card uses for the corporations' entertainment expenses. . Furthermore in 1991, it became mandatory for the businesses to spend 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 1994, so as to secure more taxation documents on the small businesses, the businesses received a tax deduction on 0.5% of the credit card transacted sales on legalizing the credit card tax refund scheme that had been limited to the regulatory degree.

1. National Tax Service, NTS's 40-Year History, p99

Even in April 1991, the NTS named a few companies who issued more credit card receipts than the legal standard as the “receipt issuance exemplary companies” among the companies from the post-management sector such as the hospitality sector in accordance with the “promotion of the credit card and cash receipts scheme.” The NTS also encouraged the subject companies to become the “receipt issuance exemplary companies” by offering preferred treatment of exempting from all kinds of taxation interferences including the tax investigation. Furthermore, the NTS either designated or encouraged the companies in the hospitality sector with KRW 30 million or more projected annual sales volume to participate in the scheme. These efforts, in comprehensive manner, helped to lay the foundation for the use of credit cards in commercial transactions.

In general, the low accuracy of the self-employers’ income can be attributable to two aspects. One is the ‘omitted income’ and the other is the ‘overstated expenses.’ The ‘omitted income’ is the alterations on the actual occurrence of the transactions found in the societies with low transparency. On the other hand, the ‘overstated expenses’ is the adjustment on the existing record of transaction and often found to underreport the income for a given size of transactions or when it is difficult to modify the whole transactions. The omission of income or underreporting of income has been the major means of tax evasion.

The omission of income, which provides the simplest method for ‘tax evasion,’ is often used when the level of transparency in commercial transactions is relatively low. In particular, the business owners who provide a product or service directly to the end users are engaged relatively more in cash transactions. This makes it difficult for a third party to know the occurrence of such transaction. Under these circumstances, the business owners or the self-employers often evade income tax by omitting cash sales from their income statements. When sales of transactions that are difficult for a third party to verify are omitted, not even a tax audit would be much effective in detecting omitted sales, although tax authorities have been focused on encouraging taxpayers to demonstrate integrity in the payment of income tax by enforcing rigid penalty clauses upon violators when auditing taxes. 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, for certain types of businesses which provide a product or service directly to end users, it was found that the businesses tended to avoid accepting credit card payments for fear that their income would be disclosed. As a result, to effectively prevent underreporting of income by the omission of cash sales, the government developed a strategy whereby it attempted to change the behavior of the parties of a commercial transaction beforehand. To this end, it provided appropriate tax reduction incentives, rather than relying on tax audits, which is an ex-post and compulsory 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 method of payment by reducing taxes.

The credit card income deduction scheme aimed at achieving two major policies. First, it aimed to make the business transaction more transparent than the traditional practice that had been difficult for a third party to detect the occurrence of a transaction. The use of credit card in transaction enhances the transparency in other related businesses including the distribution process by leaving the transaction history in both the involved parties and the credit card company. In addition, with a tax incentive available to end users, the relatively greater portion of payments in cash could be reduced. Such reduction would help to improve the overall social transparency by encouraging buyers to engage in more transparent transactions, including discouraging the tendency of transaction parties to evade taxes.

Second, it also helps to reduce the increasing tax burden of wage earners. It was generally agreed that there was a difference in the level of transparency when it came to the taxable income of wage earners and self-employers. In other words, it was found that the businesses were more accurate in reporting taxable income paid to workers, whereas business owners or self-employers tended to underreport their income. The considerable disparity in reported income found between wage earners and businesses has caused the government to implement tax policies relatively more favorable to wage earners. By making credit card payments tax deductible for only wage earners, the government was also able to achieve greater equity in the taxation between the wage earners and the business owners.

Meanwhile, the introduction of the credit card income deduction scheme was thought to have significantly improved the transparency of the tax base of the business owners in the early 2000's, with an active participation of wage earners in the scheme. However, the government had to seek for additional policies due to the persistence of cash payments in commercial transactions. In other words, even though the implementation of the scheme resulted in more credit card transactions on the part of buyers, 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 total private consumption expenditures (408 trillion won) as of 2002. It appeared that wide practice of paying in cash was attributable mainly to the fact that end users were more likely to make cash payments for a product or service directly provided by businesses, including professionals, hospitals and clinics, after-school academics, restaurants, etc. Credit card payments accounted for up to 90% of the total sales in 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 sought to introduce a new strategy aimed at better verifying the source of income from cash transactions while actively promoting the use of credit cards. The

‘mandatory receipts designation’ was one such strategy that was contemplated by President Noh, who pledged to introduce it during his presidential campaign. However, this scheme was replaced by the ‘cash receipts scheme’ as managing mandatory receipts presented difficulties and required 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.

2. Description of the Scheme

2.1. The Credit Card Income Deduction Scheme

2.1.1. Description of the Scheme

The ‘credit card income deduction’ scheme was introduced in September 1999 with the goal of making income sources of business owners or self-employed workers more transparent and of 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. As a result, salary income earners were more transparent in reporting taxable income compared to owner-operators. Then, the issue of greater equity in taxation became pressing depending on the type of income, i.e. between salary income and business income, under the current tax system. The government thus was compelled to come up with a policy response that would address this issue.

Specifically, the income tax deductible (the amount deductible from one’s total annual salary) was set at 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 available to an individual taxpayer, a maximum limit was set on the deductible amount; i.e. the lower of either an amount of 3,000,000 won or 10% of the total salary for the taxation year was applied. The goal of a maximum limit was to prevent significant tax revenue losses resulting from the introduction of a new tax scheme. The deductible amount of credit card payments covered the individual taxpayer or employee and working members of the taxpayer’s household. As part of the deductible amount, individual taxpayers were allowed to include the credit card payments of their spouse and immediate family members with annual income of less than 1,000,000 won and were required to file an income tax return under the

Income Tax Law. This policy aimed to increase the use of credit cards for private consumption and to help reduce the tax burden in proportion by allowing the consumption of family members to be covered under the worker's allowable deductible amount. In this respect, along with credit cards, a main means of transaction, debit card transactions were also recognized in implementing the scheme. Debit card transactions are expected to bring similar effects as credit cards in raising the level of transparency in commercial transactions.

Meanwhile, the government also provisioned certain exceptions in the credit card income deduction scheme that did not allow certain credit card payments to be tax deductible. First of all, expenses associated with real estate lease transactions and other business income, forestry income or incorporation expenses were excluded from the income deduction scheme. In terms of unearned income, expenses incurred in the course of earning such income were excluded in the calculation of the person's taxable income. As a result, any income excluded from the total taxable income would not be included in the calculation of credit card tax deductibles. In addition, illegitimate credit or debit card payments are not tax deductible under the provisions of the Enforcement Decree, which states that receipts which do not involve the delivery of goods or services or receipts of a slip carrying an amount which exceeds the amount of actual purchase are not tax deductible. Also, receipts of a credit card slip issued under the name of another credit card or debit card holder are not tax deductible if the payer had knowledge of such unethical practice.

Table 1-2 | Excluded Expenses from Credit Card Payments

<ol style="list-style-type: none">1. Expenses associated with real estate lease and other business income, forest income, or incorporation expenses2. Payments associated with the desirable method of using a credit card or debit card, including pretending to sell a product or provide services, as set forth under the Presidential Decree. (Provisions in the Enforcement Decree)<ol style="list-style-type: none">1) A credit card purchase which did not involve the delivery of a good or service or the credit card receipt amount exceeds the amount of the actual purchase2) Submitting a credit card receipt which was issued under the name of another person's credit card or debit card with the payer having prior knowledge of such unethical practice. In such case, the payer is deemed to have received the receipt with prior knowledge if the person has received a sales receipt bearing a name other than the name of the actual seller.
--

The NTS (National Tax Service of Korea) has excluded certain expense items as tax deductible if 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 would not contribute to enhancing transparency of commercial transactions

even when the transactions are facilitated via credit card instead of cash. Such transactions 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. Other transactions also include premiums paid for life and accident insurances that are sold by a post office, agricultural cooperative, fisheries cooperative, credit union, or community credit cooperative, which are part of the public sector, and thus, are significantly influenced by the government. 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, are also not tax deductible, even when such fees were paid using a credit card.

Table 1-3 | Excluded Expenditure Items from Credit Card Payments

1. Premiums paid to the government under the National Health Insurance Act, Employment Insurance Act; Pension premiums paid under the National Pension Act; Premiums or deductibles paid under an insurance contract in accordance with Article 25 (clause (2)) of the Enforcement Decree of the Income Tax Law.
(Clause (2), Article 25 of the Enforcement Decree of the Income Tax Act)
 1. Life insurance contracts under the Insurance Business Act (excluding retirement insurance contract subject to group retirement insurance contract and Article 34 of the Labor Standard Act) or accident insurance contracts.
 2. A life insurance premium deductible contract or damage insurance premium deductible contract sold by one of the following institutions in accordance with applicable laws:
 - A. National Agricultural Cooperatives Foundation-NACF set forth in the Agricultural Cooperatives Act.
 - B. National Federation of Fisheries Cooperatives set forth under the Fisheries Cooperative Act.
 - C. Deleted (12.31.1999).
 - D. National Credit Union Federation of Korea set forth in the Credit Union Act.
 - E. Korean Federation of Community Credit Cooperatives set forth in the Community Credit Act.
 3. A post office savings contract in accordance with the laws governing post office savings and insurances.
2. Tuition fees, admission fees, child care expenses and other school fees paid to elementary, middle/high schools under the laws related to elementary, middle/high school education and higher education, or schools under special laws (including graduate schools), and child care facilities in accordance with the laws governing child care.
3. National taxes, local taxes, electricity fees, water fees, telephone charges (including Internet usage billed together with telephone charge), gas charge, TV viewing fees (including fees paid for cable television services in accordance with the Cable Television Networks Act).

2.1.2. Government's Focus on 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 businesses could offer buyers more ways to make commercial transactions using credit cards. 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 perspective of business owners, cash transactions are preferable over credit card transactions. Cash transactions provide greater incentive to omit the sales from their taxable income. Transactions in cash are also less costly because payments using a credit card incur fees payable to credit card companies. Taking into account the cost considerations of businesses, the government focused its efforts on reducing the cost burden by implementing various tax benefit schemes including additional deductions on input VAT based on the amount of credit card payments, and tax benefits for the portion of increase in reported income.

2.1.2.1. Input VAT Deduction Based on Credit Card Sales

Under the 'credit card receipt tax relief' scheme, a tax deduction on payable taxes is allowable by applying a prescribed rate on taxes payable in cases when the business owner has provided VAT-applicable goods or services and issued a credit card slip upon receipt of payment. The scheme aims to help reduce the cost burden of credit card transactions shouldered by businesses to ultimately promote the use of credit cards. Another reason for this is that the scheme would produce similar results found in the tax relief scheme whereby a tax relief equivalent to 0.5% of the credit sales (credit card slip) will be provided if a business owner issued a VAT statement using a cash register to the customer.

This scheme became mandatory in 1994 per Article 32-2 of the Value-Added Tax Act. The tax relief of 0.5%, at the time the scheme was implemented, was set at the same rate applied to sales transacted via a cash register, so as to prevent distortions in the selection of a means of payment. The application of the scheme was limited to small business owners which were required to enhance transparency in commercial transactions.

Table 1-4 | Clauses Stipulating Tax Deduction Based on Credit Card Payments under the Value-Added Tax Act (1994)

Article 32-2. Credit Cards (1) If a business owner set forth in the Presidential Decree has provided a product or service to which VAT is applied and issued a credit card slip pursuant to the Credit Card Services Act (hereinafter the “Credit Card Slip”) upon issuance of a tax invoice in accordance to clause (1) in Article 16 hereof, an amount equivalent to 5/1000 of the amount paid by credit card may be deducted from the tax payable or add to the tax refundable, provided that this clause shall not apply to corporations and obligors under the double entry system set forth in Article 184 of the Income Tax Law.

(2) The credit card slip set forth in clause (1) above shall be deemed to be a simplified tax invoice set forth in clause (2) in Article 16 or clause (4) in Article 26 hereof.

(3) When a general taxpayer has recorded the buyer and the VAT amount separately on the credit card slip, such VAT shall be deemed to be eligible for input tax deduction in accordance with clause (1) in Article 17 or clause (3) in Article 26 hereof.

(4) Clause (2) in Article 32-2 hereof shall not apply to businesses which have provided a product or service and then deducted an amount equivalent to 5/1000 of the amount paid through credit card from the tax payable or added to the tax refundable in accordance with clause (1) above.

(5) Besides clauses (1) ~ (4) above, the scope of tax credits against the amount paid through credit card (credit card slips) and other matters required to be addressed shall be determined by the Presidential Decree.

With the inception of the credit card income deduction scheme in 2000, the government increased the tax deductible 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 5,000,000 won on the amount allowable for tax deductibles. It limited the eligibility of input tax deductions on invoiced VAT to businesses having direction transactions directly with buyers such as retailers, restaurants, accommodation service, public bath house, barber shops, beauty salons, ferry service, and issuers of admission tickets. Similar to credit cards which are a transparent means of transaction, the government included the use of debit cards as a method of payment to discourage selective use of either payment method.

Table 1-5 | Input VAT Deduction (2000) Based on Credit Card Payments

Article 32-2. Eligibility for tax credits for the amount paid by credit card. (1) If a business owner (excluding corporations) set forth in the Presidential Decree has provided a product or service to which VAT is applied and issued a credit card slip or an equivalent to in accordance with the Credit Card Services Act under the Presidential Decree (“Credit Card Slip” within the intent of this Article) upon issuance of a tax invoice in accordance to clause (1) in Article 16 hereof, an amount equivalent to 2/100 of the amount paid through credit card (i.e. credit card slip) (not exceeding 5,000,000 won a year) may be deducted from the tax payable or add to the tax refundable. (Amended 22.12.1994, 29.12.1995, 28.8.1997, 28.12.1998, 28.12.1999)

(2) The credit card slip set forth in clause (1) above shall be deemed to be a receipt set forth in clause (1) in Article 32 hereof. (Amended 22.12.1994, 28.12.1998)

(3) When a general taxpayer has recorded the buyer and the VAT amount separately on the credit card slip, such VAT shall be deemed to be eligible for input tax deduction in accordance with clause (1) in Article 17 or clause (3) in Article 26 hereof. (28.12.1998)

(4) The Director of the NTS may designate a business within any of the following parameters as an eligible credit card participant set forth in the Specialized Credit Financial Business Act and provide administrative guidance to encourage the business to participate in the credit card scheme. (Added 28.12.1998):

- Business owner who provides a product or service for a buyer (whose is not engaged in a business) and who is deemed to be brought at attention for taxation purposes under the Presidential Decree.

(5) Besides clauses (1) - (4) above, the scope of tax credits against the amount paid by credit card (credit card slips), designation of potential credit card participants, and other matters required be addressed shall be determined by the Presidential Decree. (Amended 29.12.1995, 28.12.1998) [This Article was newly added 31.12.1993]

Table 1-6 | Eligible Types of Businesses for Tax Deduction Based on Credit Card Payments

Enforcement Decree of the Special Tax Control Act

Article 80. Implementing Credit Cards and Cash Registers

(1) The “person set forth in the Presidential Decree” referred to in clause (1) in Article 32-2 of the Act and in clause (1) in Article 32-3 of the Act means the person set forth in clauses (1) and (2) in Article 79-2 hereof.

Enforcement Decree of the Special Tax Control Act

Article 79-2. Payment Receipts

(1) Business owners (general tax payers) who are engaged in any of the following businesses and the business owner set forth in Article 25 of the Act shall issue receipts

pursuant to clause (1) under Article 32 of the Act. (Amended 31.12.1998, 31.12.1999)

1. Retail
 2. Restaurant (including bakery shops)
 3. Accommodation service
 4. Public bath, barber shops, beauty salons
 5. Ferry service
 6. Issuance of admission tickets.
 - 6-2. Businesses and administrative services in accordance with clause (2) (Item 7) in Article 160-2 (excluding services provided for the business owner set forth in Article 2 of this Act and clause (2) in Article 160-2 of the Income Tax Act).
 7. A business which provides a product or service for a buyer (whose is not engaged in a business) and who is deemed to be brought to attention for taxation purposes under the Order of the Ministry of Strategy and Finance.
- (2) Notwithstanding clause (1) above, the business owner may provide the receipt in one of the following situations:
- a. If a business which has a temporary place of business, set forth in Article 4-2 hereof, has provided a product or service for a buyer (whose is not a business owner);
 - b. If an electricity service business set forth in the Electricity Enterprises Act has supplied electricity for a purpose other than industrial use.

In addition to determining a tax deductible rate for the amount paid by credit card, the government established provisions that allowed the Director of the NTS to designate potential taxpayers that could qualify and encourage them to participate in the credit card income deduction scheme. In determining the criteria for qualified taxpayers, the government gave a broad of range of considerations within the parameters set under the Enforcement Decree of the VAT Act, including type of business operation, size of the business, and business location. Such qualified taxpayers consisted of businesses providing a product or service directly to end users (who are not a business owner), including retail, restaurant and hospitality 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 for the credit card income deduction scheme so it can be utilized in a more effective manner.

Table 1-7 | Designation of Potential Credit Card Participants

Enforcement Decree of the Value-Added Tax Act

Article 80. Operation of a Credit Card and Cash Register

(5) The “person set forth under the Presidential Decree” referred to in clause (4) under Article 32-2 of the Act shall mean the individual who owns a business including retail, restaurant/accommodation which provides a product or service directly to end users (who do not conduct business activities), as determined by the Director of the NTS taking into account the size of business and the location of workplace, etc. (Amended 31.12.1998).

2.1.2.2. Tax Deduction Based on an Increase in Reported Income (Sales)

‘Tax deduction based on an increase in income’ offers higher tax reductions based on increased usage of the credit card scheme intended to improve transparency in commercial transactions. In other words, this scheme aims to lessen the cost burden of buyers, i.e. credit card commission fees. It also sought to alleviate privacy concerns on the part of buyers which could hinder the implementation of the scheme for fear that their taxable income should be disclosed. Increased amount of credit card payments in the appropriate taxation year relative to the previous year may be deducted from 50% (the maximum limit) of credit card payments of their total reported income. This scheme which began in January 1999 for the purpose of promoting transactions with credit card payments contributed to the effectiveness of the credit card income deduction scheme (September 1999) which focused more on buyers.

Special Tax Treatment Control Act

Article 122. Tax Deduction on an Increase in Sales

(2) If a consolidated tax return is filed by a business owner, who is a credit card participant set forth in the Specialized Credit Financial Business Act or is employing the PSS in the workplace under the Distribution and Logistics Industry Promotion Act, set forth under the Presidential Decree, proved that the company’s sales for which payment was made through credit cards designated for individual workplaces (which are similar to a credit card and include any payment means set forth under the Presidential Decree) or through the POS (Point of Sales System) (hereinafter “Credit Card Sales”) exceeds that of their total sales in the preceding taxation year, the company will be entitled to a tax credit for the current taxation year calculated using the following formula:

Consolidated income tax x (50/100 of the excess amount / the current taxation year’s total sales).

The resulting figure will be deducted from the tax payable in the current taxation year.

Enforcement Decree of the Special Tax Treatment Control Act

Article 117. Tax deduction on an increase in sales

(3) The “person set forth under the Presidential Decree” shall mean an individual who is engaged in a business as a credit card participant pursuant to the Specialized Credit Financial Business Act or had a business using the Point of Sale System (hereinafter “PSS”) which is linked to their headquarters or Distribution and Logistics Industry Promotion Act (hereinafter “Headquarters” for within the intent of this Article) under the Distribution and Logistics Industry Promotion Act for at least one (1) year commencing on the last day of the taxation year immediately preceding the taxation year in which they would receive a tax deductible under this Article.

(4) Granting a tax deduction in respect of the PSS under clause (2) in Article 122 will be made only if the appropriate business owner, together with their headquarters, have submitted to the Director of the NTS their completed application to use the PSS set forth under the relevant Order of the Ministry of Strategy and Finance and their sales records shown by the PSS for the preceding taxation year within three (3) months after the first day of the taxation year in which they would receive a tax credit for the first time, and their HQs has submitted to The Director of the NTS its individual participants’ sales records from the PSS using the PSS sales statement form set forth under the Order of the Ministry of Strategy and Finance by the following deadlines:

1. Sales for the period between January 1 and June 30 of a year: July 31 of the year.
2. Sales for the period between July 1 and December 31 of a year: January 1 of the following year.

2.1.2.3. The Credit Card Slips Lottery Program

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

In the case of the credit card deduction scheme, eligible salary income earners may be discouraged to take advantage of the tax deductibles, since it would require disclosing their current usage, may discourage buyer participation in the scheme. In addition, taxpayers eligible for such deduction may also be entitled to income deduction at a maximum of 10% of additional portion of usage, not exceeding 3,000,000 won. This could encourage usage of the scheme. The credit card receipt lottery program was introduced as a strategy to encourage the use of credit cards among this group.

By offering a lottery prize of up to 100 million won, the government was able to induce the active use of credit cards among the low-income group. Under the current tax system, people with low income were granted a significant amount of income deduction, relative to their average salary. This condition also 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, the government also launched the credit card participant lottery program. This scheme was initiated and financed by the Credit Finance Association (CREFIA), a private organization, with the intent of increasing the use of credit cards as a payment method.

This lottery program was launched under government policies. The first lottery drawing targeted credit card slips (including debit card slips) in February 2000. The credit card slip lottery program evolved as the use of credit cards has become quite common these days. With the growth of credit card usage, the lottery program which was focused on encouraging the use of credit cards was abandoned in January 2005. This was followed by the discontinuation of the lottery program in January 2006, which had been focused on increase the use of credit cards among buyers. However, the lottery program had still been maintained based on debit card slips and cash receipts to encourage their usage by buyers.

Table 1-8 | Regulations Regarding the Credit Card Slips Lottery Program

The Value Added Tax Act

Article 32-4. Credit Card Rewards Scheme (1) The Director of the NTS may grant a reward by implementing a lottery based on the corresponding sales slips for those who purchased a product or service (including items to which VAT is not applied) and was issued a credit card slip set forth in the Specialized Credit Financial Business Act or an equivalent set forth under the Presidential Decree (hereinafter called “Sales Slip” within the intent of this Article), provided that this reward shall be granted within a parameter set forth under the Presidential Decree.

(2) A person who is engaged in credit card services under the Specialized Credit Financial Business Act shall submit to the Director of the NTS the information/data on sales slips required to be present pursuant to clause (1) hereof, notwithstanding Article 4 of the Act on Real Name Financial Transactions and Guarantee of Secrecy and Article 24 of the Use and Protection of Credit Information Act.

(3) Pursuant to clause (2) above, the Director of the NTS may allow disclosure of the submitted information/data to the organization involved in lottery for use in the lottery.

(4) A person’s entitlement to the reward under clause (1) above shall be deemed to have breached extinctive prescription if the right is not exercised within three (3) months after the payment due date. When the period of extinctive prescription has elapsed, the

respective reward shall be reverted to the government.

- (5) Act on Special Cases concerning the Regulation and Punishment of Speculative Acts, etc. including unethical practices shall not apply to the lottery drawing based on sales slips and the payment of rewards set forth under clause (1).
- (6) For the purpose of clause (1) above, lottery methods, the amount of rewards and other matters required to be addressed in this respect shall be as set forth under the Presidential Decree.

The Value Added Tax Act the Enforcement Decree

Article 82. Credit card user reward program (1) The “slip set forth under the Presidential Decree” referred to in clause (1) of Article 32-4 hereof means a debit card slip set forth under the Specialized Credit Financial Business Act.

(2) The “slip set forth under the Presidential Decree” referred to in the conditional clause (1) of Article 32-4 hereof means any of the following:

1. A credit card slip or debit card slip, which is set forth under the Specialized Credit Financial Business Act, issued under the name of a company or group (hereinafter the “Sales Slip” within the intent of this Article).
2. A sales slip used by a Korean national overseas.
3. A sales slip issued to a buyer without having delivery of a product or service or issued in excess of the amount actually purchase.
4. A credit card slip issued under the name of another credit card or debit card participant if the payer had the knowledge of such unethical practice. In such case, the payer is deemed to have received the slip with the knowledge of the practice if the person has received a sales slip bearing a name other than the name of the actual seller.
5. A credit card slip received for the payment of premiums to the government under the National Pension Act, National Health Insurance Act, Employment Insurance Act, etc., as well as life insurance premiums and deductibles paid to private insurance companies under clause (2) of Article 25 of the Enforcement Decree of the Income Tax Act.
6. A credit card slip received for payment of the following: tuition fees, admission fees, child care expenses and other school fees paid to elementary, middle/high schools under the laws related to elementary, middle/high school education and higher education, or schools under the Special Act (including graduate schools), and child care facilities in accordance with the laws governing child care.
7. A credit card slip received for payment of the following: national taxes, local taxes, electricity fees, water fees, telephone charge (including Internet usage billed together with the telephone charge), gas charge, TV viewing fees (including fees paid for cable television services in accordance with the Cable Television Networks Act).
8. Other similar slips set forth by the Ministry of Strategy and Finance.

- (3) For the purpose of clause (2) of Article 32-4 hereof, credit card companies and the CREFIA set forth by the Specialized Credit Financial Business Act and their transaction information/data such as monthly total sale slips to The Director of the NTS
- (4) In respect to the payment of rewards to credit card users, the Director of the NTS may determine other matters to be addressed, including the methods of lottery, the amount of rewards, reward payment time and payment methods.

2.2. The Cash Receipt Income Deduction Scheme

2.2.1. Description of the 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 a scheme called the ‘tax card’ scheme² as one of its strategies for reducing the cost burden of business owners, i.e. credit card commission fees, which increased with the growth of credit card transactions.

As an outcome of the cash receipt deduction scheme, a strategy for encouraging active use of credit cards, the rate of total private consumption expenditures relative to the amount of credit card transactions significantly increased to 39.0% in 2004 from 23.6% in 2000. But the size of increase was minimal. For example, the rate in 2003 was -2.0% (from 42.6% to 40.6%) which was significantly lower than that in the preceding year which saw a 5.7% growth (from 36.9% to 42.6%). The minimal effects of the scheme necessitated additional reviews of the scheme. In particular, the strategy for promoting the growth of credit card transactions by increasing the use of credit cards among buyers did not serve as a merit for small micro businesses with low profits that had to shoulder the cost burden of credit card commission fees. As a result, the government began to promote another strategy directly focused on encouraging transactions via cash other than credit card.

2. The Tax Card program was designed to enable the automatic notification to the NTS of cash transaction details via credit card terminals when the Tax Card (a tentative name), used exclusively for cash payment, is used for cash purchases. But at the time, credit card terminals were not available on a nationwide level and there was the likelihood of the public's rejection of the scheme if launched in conjunction with implementing strategies for encouraging active public involvement. Realizing that it was difficult to implement policies under the given circumstances, the government sought to promote strategies for motivating buyer active participation before making a decision on whether it would implement the scheme, depending on the conditions that permitted such action.

Table 1-9 | Trends on Credit Card & Cash Payments vs. Private Consumption Expenditures

(Unit: 100 billion won, %)

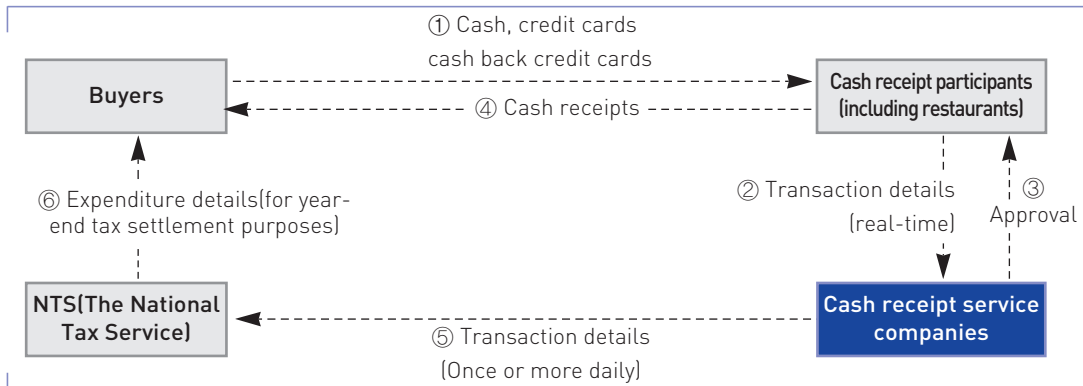
Category	2000	2001	2002	2003	2004	2005
Final private consumption expenditures	3,303.9	3,642.5	4,087.2	4,201.0	4,350.6	4,654.3
Credit card payments	779.8	1,343.3	1,741.3	1,705.9	1,698.1	1,984.2
Credit card transaction rates	23.6	36.9	42.6	40.6	39.0	42.6
Cash transaction rates	76.4	63.1	57.4	59.4	61.0	57.4

Note: The amount paid by credit card (1) excludes personal banking services and the corporate credit cards (launched in 2000) and (2) includes debit card and check card transactions (except pre-paid cards).

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

Under the cash receipt scheme, businesses are required to issue cash receipts through a cash receipt printer as a buyer presents a card (including point reward cards and credit cards) and mobile phone number for sales of a product or service paid in cash. Then a cash receipt service company submits information on the individual cash transactions to the NTS.

Figure 1-1 | Cash Payments Flow



The cash payment flow under the cash receipt system shows the detailed operational procedure for the scheme. The cash receipt participant is a business with a credit card terminal with a ‘cash receipts printer’ that transmits cash payment details to the NTS via cash receipt service companies. Among these companies, since late 2004, the government has been making guidance mandatory for businesses with annual reported sales directly to buyers of 24 million won or greater³ to encourage their participation in the scheme. Taxpayers eligible for cash

3. Pursuant to Article 162-3 of the Income Tax Act and Article 210-3 of the Enforcement Decree of this Act.

receipts are categorized as ‘buyer,’ but this category includes businesses, which are also issued such cash receipts as documentation on business expenditures, in addition to buyers who are issued cash receipts for income deduction purposes. The businesses participating under this scheme must have a cash printer machine installed by the receipt service companies which approve the numbers on the cash receipts issued. Then, the cash receipt companies collect and transmit the details of the cash transactions to the NTS.

With the cash receipts, a buyer can deduct the amount of the cash receipts from taxable income. Under the scheme, the amount deductible is added to the amount deductible under the existing credit card deduction scheme. As a result, buyers are entitled to the same deductible rate as offered under the credit card deduction scheme. Specifically, under the credit card income deduction scheme which covers 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.

2.2.2. Government’s Focus on 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 achieving the similar policy goals for cash payments as in credit card payments under the income deduction scheme, it was found that the government’s various policies resulted in cash transactions being treated equally with credit card transactions. In particular, the measures on input VAT deduction 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 had similar policy results relative to credit card-based payments.

2.2.2.1. Input VAT Deduction Based on Cash Receipts

The input VAT deduction scheme applied to cash transactions was incorporated into the existing scheme under which input VAT deduction is applied to credit card transactions alone. This government policy helped promote active issuance of cash receipts where necessary. Deductible rates at the early stage of the implementation of the input VAT deduction scheme focused on cash transactions was 1.0%, which has been applied since 2004, with a ceiling of 5 million won. However, the decrease in the deductible rate, relative to the previous deductible rate of 2%, given the rate of growth of credit card uses, became an impediment to promoting active participation by users in the cash receipt scheme. As a result, the government allowed a deductible rate of 1.5%, a higher rate was applied to business owners engaged in businesses such as restaurant and hospitality which have relatively more cash transactions.

Table 1-10 | Trends of the Input VAT Deduction Scheme Based on Issued Credit Card Slips (and cash receipts)

Year	Deductible rates (%)	Maximum deductibles
1994~95	0.5	-
1996~98	1.0	-
1999	1.0	3,000,000 Won / year
2000~03	2.0	5,000,000 Won / year
2004	1.0	5,000,000 Won / year
2005~07	1.0(1.5)	5,000,000 Won / year
2008	1.0(2.0)	5,000,000 Won / year
2009~10	1.3(2.6)	7,000,000 Won / year
2011~	1.0(2.0)	5,000,000 Won / year

Note: 1. Deductions are applied to the amount paid through credit card (or credit card slips) or other electronic payment means set forth under the Enforcement Decree of the Value-Added Tax Act.

2. Effective in 2004, businesses (business owner) should include the amount paid through credit card such as 'credit card slips' in the amount of cash receipts that they issued as set forth under Article 126-3 of the Special Tax Treatment Control Act.

3. The figures between the parentheses (), are applied to simplified taxpayers who are engaged in accommodation services.

4. The notation '-' means that no maximum limit of deductible existed.

2.2.2.2. 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 in cases the amount of cash receipts issued increases or the portion of cash receipts increases relative to credit card transactions which include cash transactions (i.e. issued cash receipts) with the goal of lessening the increased tax burden on 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 'increase in credit card sales of their total income,' other than the deduction method focused on the 'increase in sales based on credit card payments.' It is assumed that tax deduction methods based on sales is a more of a 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 between the two methods when applying for income tax deductibles.

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

On the other hand, the deduction method ‘based on the credit card-based sales’ has a low degree of relevance when it comes to transparency in business transactions because the deduction under this method is applied to only a portion of the sales. As a result, the deductible rate has steadily been reduced to 5% in 2005 when the cash receipt-based deduction scheme was implemented.

Table 1-11 | Trends of the Tax Deduction Scheme Based on an Increase Reported Sales (income)

Year	Category	[Optional] Deductible rates (%)	
		Based on an increase in credit card sales	Based on an increase in credit card sales relative to total sales
1999~2000		50	-
2001~02		50	20
2003		50	10
2004~09		50	5
2010		40	4

2.2.2.3. 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 receipt-based lottery has been implemented, complemented by junior lottery program operated separately with the aim of enhancing the awareness among younger consumers about the issuance of cash receipts. On the other hand, the credit card slip lottery program was discontinued in January 2006 with the aim of further promoting the lottery programs based on cash receipts and debit card slips as a financial resource because the tax authorities concluded that the use of credit cards in business transactions had already become common.

During the early stage of the lottery program, a maximum limit of 100 million won was set on the prize money based on cash receipts and credit card slips. The prize amount was reduced to 10 million won in January 2006 to give more participants a chance to win. Since August 2007, lotteries based on cash receipts targeting certain businesses have been conducted separately to encourage the voluntary participation of 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 credit card participant lottery program was abandoned in 2005 as the tax authorities concluded that a sufficient number of businesses were participating in the scheme. The cash receipt participants 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 1-12 | The Scope of Eligible Businesses and the Size of Prize Money under the Cash Receipts Lottery Program

Year	The Scope of Transactions Eligible for a Lottery			Prize Money (Users)	
	Users		Credit Card Participants	Max.	Min.
	Credit Cards/ Debit Cards	Cash Receipts			
2000. 1.	Inception of the credit card receipt lottery program (including debit cards)	-	The inception of the credit card participants lottery program	100,000,000 won	10,000 won
2004. 1.	Lottery on credit card receipt and debit card receipt each separately	-	↓	↓	↓
2005. 1.	↓	The inception of the cash receipts lottery program (the junior lottery program is operated separately)	The credit card participants lottery program is abandoned	↓	↓
2006. 1.	The credit card receipts lottery program is abolished. The debit card receipts lottery program is retained.	Modification of the cash receipts lottery program (the junior lottery program is incorporated in the adjust lottery program)	-	10,000,000 won	50,000 won
2007. 8.	↓	Separate lottery on the types of businesses demonstrating low levels of cash receipts participation	-	10,000,000 won (100,000 won) ¹¹	50,000 won

Year	The Scope of Transactions Eligible for a Lottery			Prize Money (Users)	
	Users		Credit Card Participants	Max.	Min.
	Credit Cards/ Debit Cards	Cash Receipts			
2008. 8.	↓	↓	Inception of the cash receipts participants lottery program	↓	↓
2009. 1.	↓	↓	↓	30,000,000 won (30,000,000 won)	↓
2010. 1.	The debit card receipts lottery program is abolished.	The inception of the credit card participants lottery program (Separate lottery on the types of businesses demonstrating low levels of cash receipts participation abolished)	The cash receipts participants' lottery program is abandoned.	50,000 won	

Notes: 1) The figures in the parentheses () refer to the highest amount of prize applied to those types of business operations demonstrating low level involvement in the issuance of cash receipts. Designation of business operations demonstrating low level involvement in the issuance of cash receipts began in August 2007 for a lottery, separately. A maximum prize set for those types of business operations demonstrating low level involvement in the issuance of cash receipts was 30 million won, the same maximum prize applied to other cash receipts lottery programs, with the aim to encourage their voluntary participation.

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

2.3. Strengthening the Foundation for Incentive and Sanction Policy Implementation

Coupled with various government policies, the credit card and cash receipt income deduction scheme, which were designed to enhance transparency in commercial transactions, have turned out to be 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 implemented a reward scheme for reporting to strengthen the collection of credit card and cash receipts from business owners and their acceptance of credit cards and issuance of cash receipts.

2.3.1. Designation of Potential Users of the Credit Card and Cash Receipt Scheme

2.3.1.1. Users of the Credit Card Scheme

In 1998, the government proposed a legal framework for establishing parameters to designate potential users of the scheme under the Value-Added Tax Act, the Corporation Tax Act, and the Income Tax Act. This was to grant the Director of the NTS authority to designate business owners or self-employed workers and corporations that had transactions directly with buyers as eligible users of the credit card scheme (mandatory users).⁴

Table 1-13 | Mandatory Rules Regarding Credit Card Scheme

The Income Tax Act (1999)

Article 162-2. Administrative guidance to encourage user participation in credit card scheme (1) The Director of the NTS may designate the person, who provides a product or service directly to buyers (who are not a business owner) and who is set forth under the Presidential Decree and is required to be a scheme participant for taxation purposes, as a potential credit card participant set forth under the Specialized Credit Financial Business Act and provide administrative guidance to participation:

(2) Any matters to be addressed regarding designation of potential credit card participations under clause (1) above shall be determined pursuant to the Presidential Decree.

Enforcement Decree of the Income Tax Act (1999)

Article 210-2. Any matter required to be addressed regarding the designation of potential credit card participants stated in clause (1) shall be determined under the Presidential Decree. (1) The ‘person set forth under the Presidential Decree’ in clause (1) of Article 162-2 of the Act means the person who is engaged in any of the following business activities and who has been designated as an eligible credit card participant by the head of the Tax Office having jurisdiction over the location of the workplace or the head of the regional Tax Service office, as set forth in the instructions of the Director of the NTS, after the type and size of the business have been taken into consideration:

1. Retail
2. Restaurant and accommodation services
3. Business which involves the provision of a product or service mainly for buyers who are not a business owner and which is set forth by the Director of the NTS.

(2) The Director of the NTS may determine the procedure for designation and other necessary details related thereto, within the scope required for taxation purposes.

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.

Furthermore, since the scheme was introduced in 1999, the criteria for ‘designating eligible users based on the size of a particular business (sales)’ have been supplemented and reinforced⁵ in order to increase the number of users under the credit card scheme. This action resulted from the government’s policy to consider the cost burden faced by credit card participants, taking into consideration the amount of sales a business generated based on type of business.

The number of designated types of businesses reached as many as 209 in 1999, consisting of businesses that had direct transactions with buyers, including retails, restaurants, hospitality, and other services. This number increased to 228 by 2001, and then to 235 by 2009.

Despite the different categories of business that were eligible to participate, sales amounts were used as the basis for deductions, depending on their market situation. A business (among retail, restaurants, hospitality and other designated services that had direct transactions with buyers) with sales of 150 million won or greater from the previous as of the first half of 1999 was designated as a credit card participant. On the hand, businesses that provided professional services were also designated as a potential credit card participant if it recorded sales of 48 million won or greater in the previous year. The targeted businesses were believed to suffer from low levels of transparency in transactions.

The sales threshold for each type of businesses has been steadily adjusted downwards, resulting in an increase in the number of eligible users. It was concluded that his policy has helped enhance the overall level of user participation in the credit card scheme.

Table 1-14 | Designated Business Types Applicable to Eligible Credit Card Scheme (2009)

Relevant to [Appendix 3-2] (revised 22.2.2008)

Business types providing a product or service directly to the buyers

(Pertinent to Article 210-3)

Business Categories	Types of Business Operations
Retail	Any retailer including lottery ticket sellers, except businesses set forth under the Order of the Ministry of Strategy and Finance.
Restaurant and accommodation	Any restaurant and accommodation services.
Manufacturing	Business types set forth under the Order of the Ministry of Finance and Economics, including tailors.
Real estate and property lease	Real estate agency services; property appraisal services (including appraisal services); wedding dress rental.

5. There were two cases in 1999 (one in the first half, the other in the second half of the year), one case each in 2000 and in 2001.

Business Categories	Types of Business Operations
Transportation	Any of the following business services: Rent-a-bus; home moving service; funeral car; parking lot rental; travel agencies offering general international trip products; travel agencies offering domestic trip products; other travel support services including ticket sale service; passenger car terminal operations; parcel delivery services.
Professional service	Services offered by or including a law firm, patent agency, judicial scrivener, scrivener, certified labor attorneys, public accounting firm (including agency bookkeeper), tax firm (including agency bookkeeper), architectural design and related service, technology consulting service, attorney service, business management/consulting service; technical guidance service, damage assessment, customs clearance, ferriage, surveying, photography studio, photo processing.
Education and training services	Other work-related skills training including computer and stenographer skill training; other skills and vocational training including driving and automobile repair training; other unclassified educational organizations including general entrance academies, language schools, door-to-door/online teaching academies, arts schools, speech school.
Health and public welfare	General hospitals, general clinics, dental hospitals; Oriental hospitals, private practices (including general practices, internal medicine, pediatric hospital, surgery, orthopedics, neurology, dermatology, urology, ophthalmology, radiation, plastic surgery; other clinics not specifically classified) including anesthesiology, tuberculosis, family practice rehabilitation medicine); dental clinics; Oriental medicine, veterinary business.
Entertainment, culture and sports	Businesses engaged in the operation of any of the following: a movie theatre, video viewing studio; reading room, museum, botanical garden, animal zoo, indoor sports room, outdoor sports field, horse riding/tracks, golf course or ski field; other sports facilities including a fitness center, swimming pool, bowling room, billiards room, entertainment/sports complex, golf practice room; other entertaining facilities including a PC room, karaoke, amusement shooting ground; other water sports including water sports service, paid fishing ground, dancing hall, amusement park, theme park, Baduk (Korean checkers) house.
Other utility; equipment repair services; private service business	Repair of general machinery repair excluding construction/mining machinery & equipment, computer and office equipment, communication equipment, electrical and precision instruments; overall repairs of cars (including car cleaning); repair of two-wheeled cars, home appliances, shoes; alteration of dresses and other textile products for household use; repair of other personal and household items including watches, jewelry, musical instruments, boilers; other cosmetic beauty care services including barbershops, beauty salons, public bath-houses, massage services, and obesity management service; laundry; laundry facility; funeral home, funeral service, grave yards, cremation; wedding hall; fortune telling services; maternity hospital; marriage counseling services.
Home-care service business	Child care facilities, except those established and authorized under Article 13 of the Law of Early Childhood Care.

Remark: Categories of businesses shall be based on the KSIC (Korean Standard Industrial Classification), excluding the types of businesses specifically set forth in this table.

Table 1-15 | Trends in Qualifying Business for the Designation of Potential Credit Card Participants

(Unit: million won)

Category	Business type	Based on company size ¹⁾					
		1999 (first half)	1999 (second half)	2000	2001	2008~ present	
Owner-Operators	VAT non exempt	Restaurants, accommodation and related services	150 or more	48 or more	36 or more	24 or more	24 or more
		Personnel service (Professional services)	48 or more	48 or more	36 or more		All owner-operators
		Retail and other businesses	150 or more	120 or more	72 or more		24 or more
	VAT exempt	Retail	150 or more	120 or more	72 or more	24 or more	24 or more
		Hospital/clinics	150 or more	120 or more	72 or more		All owner-operators
		After-school academies	150 or more	120 or more	72 or more		24 or more
Corporations	All designated types of businesses	All corporations (no limitations on company size)					

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

Sources: Data contained in the above table are based on the data from the "2001 Credit Card Participants Increase Plan" (May 2001) of KDI and the "report of progress toward increase in credit card participants"(Dec 1999) of the NTS, in addition to the contents of amendment to the Income Tax Act enforced in those individual years involved.

2.3.1.2. Users of the Cash Receipt Scheme

In the two years ahead of implementing the cash receipt scheme in 2003, the NTS undertook various policies to ensure the successful outcome of the scheme. Starting in the second half of 2004, the government has been focused on encouraging the active participation of business owners with a cash receipt printer, along with trying to induce the participation of potential businesses. In particular, the government equipped new credit card terminals purchased after July 2004 with a built-in cash receipt printer to significantly reduce users' cost burden associated with the separate setup of a cash receipt printer.

In providing the aforementioned administrative guidance for encouraging user 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. In January 2005, they came up with the legal framework for providing such guidance. Later, the existing legal framework was amended and supplemented by new provisions. Furthermore, the scope of obligation of sellers was expanded from January 2007, which included the issuance of cash receipts in addition to mandatory participation in the cash receipt scheme.⁶ At the time, the government set the threshold for determining which businesses were eligible users in the scheme based on sales 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 terminal.

Table 1-16 | Qualifying Business for Eligible Credit Card Participants Designation

Category	Business Type	1.1.2005	22.2.2008~present
Owner-Operators	Professional services	24 million won (or more)	All owner-operators
	Hospitals and clinics		All owner-operators
	Other businesses providing a product or service directly for buyers		24 million won (or more)
Corporations	All types of businesses for designation as eligible as participants	All corporations	

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

2.3.2. Direct Costs Reduction Policy

2.3.2.1. Reduction of Credit Card Commission Fees

Credit card fees from commissions are one of the major impediments not only to increasing the number of credit card 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 strategy, the ‘credit card participant shared networking relocation program,’ was voluntary-based. It was implemented after December 24, 2001. This

6. The name of heading changes to (Administrative Guidance regarding user participation in the credit card scheme) from (Mandatory Participants; Duty to Issue Credit Card Slips). The existing legal ground included Article 117 of the Corporation Tax Act, Article 162-2 and 162-3(Mandatory Participant; Duty to Issue Cash Receipts) of the Income Tax Act.

program which began on September 9, 1999 was intended to achieve two goals. First, it sought to improve the high-cost structure of credit card services attributable to the previous practice involving concurrent management of participants (the enclosed credit card participant system) and to reduce commission rates which were the biggest impediment to promoting credit card uses.⁷ However, this strategy led to the participation of only seven credit card participants, eventually causing the existing credit card market to have a monopolistic market structure which was far from the initial goals of the government's policy. Such a monopolistic structure resulted in serious problems such as illegal collusion in respect to commission rates and misuse of authority by credit card companies when dealing with credit card participants.

In an effort to solve this problem, the government allowed credit card service companies to choose between 'using the shared networking' and 'establishing their own networking' by amending the provision all credit card service companies had to use the shared networking. This action enabled the government to promote the reduction of commission rates.

Nevertheless, even until today, the issue of reduction in credit card commission rates is still controversial. In particular, while participation of businesses, including small business owners, in the credit card scheme has become mandatory, credit card commission rates, which were determined by taking the size of business into account, have yet to be adjusted. This has been met by strong resistance from businesses to participation in the scheme. Despite this, in an effort to increase participation, the financial sector continues to improve the disclosure of credit card commission fees⁸ by simplifying the types of relevant businesses into 13 from the existing 177 business types. There is still a general consensus that further actions are required.

7. - The Financial Supervisory Commission news release "Strategies aimed at reducing credit card commission rates and establishing desirable business practices." (29.10.2001)

- The Financial Services Commission news release "Assessment results regarding the situation of the implementation of the policy aimed at rationalizing the credit card commission rate system" (30.5.2008)

- The Credit Finance Association news release "Improvement of the credit card commission rates disclosure." (25.10.2007)

- The website admin.cybergo.or.kr, "Problems with the use of credit cards shared networking and remedial action."

8. Highlight of proposal to improve the 'disclosure' system and anticipated outcome':

(1) By simplifying the 177 businesses into 13, it is easier to check commission rates across different business types and the difference in commission fees between different business types has been reduced. This helps to prevent resistance users.

(2) Disclosure of commission rates actually applied enables participants to provide accurate information.

(3) Disclosure of categorized commission rates such as credit cards and check cards helps participants to use their discretion in choosing a credit card company, providing the basis for operating the commission rates program in a more reasonable manner.

- Credit card commission rates chargeable to individual types of businesses are available from the Credit Finance Association website (<http://www.crefia.or.kr>).

2.3.2.2. Reducing Costs Associated with the Cash Receipt Scheme

To ensure successful launch of the cash receipt issuing system into the market, the NTS came up with a strategy whereby businesses could have credit card terminals equipped with a built-in cash receipt printer, instead of setting up a terminal exclusively for issuing receipts for cash payments. To promote this policy, VAT deductions per cash transaction were offered to businesses with a built-in cash receipt printer in their terminal, in addition to a deductible of 22 won per transmission (15.4 won per on-line transmission) on their input VAT when details of cash transactions were transmitted to the NTS.^{9,10.}

Grants for cash receipt service companies in financing expenses associated with the use of the cash receipt scheme (input VAT deduction on an acquisition)

(1) The number of set-ups of the cash receipt printer x (17,500 won +- 30%)

(2) The number of cash transactions × (22 won +-30%)

Table 1-17 | Government Regulations on Grants to Finance Expenses Associated with the Cash Receipt Scheme for Cash Receipt Service Companies

Enforcement Decree of the Special Tax Treatment Control Act (2005)

Article 126-1. ‘Input Tax Deduction for VAT’ applied to the cash receipt service providers (1) The issuer of cash receipts authorized by the Director of the NTS to issue cash receipts (hereinafter the ‘Cash Receipt Service Provider’ within the meaning of this Article), subject to the review of the Cash Receipts Review Committee set forth under the Presidential Decree (hereinafter the ‘Cash Receipts Review Committee’ within the meaning of this Article) shall be entitled to deduct input VAT or a VAT refund in the appropriate taxation year on a certain amount set forth under the Presidential Decree depending on the number of set-ups of the cash receipt printer set forth under the Presidential Decree and the number of cash transactions by the company who have a credit card terminal with a built-in cash receipt printer (hereinafter called the ‘Cash Receipt Participants’).

9. Tax benefits shall be determined by the Director of the National Tax Service under Article 126-3 of the Special Tax Treatment Control Act and Article 121-3 of the Enforcement Decree of the said Act.

10. The government revised the Special Tax Treatment Control Act: Effective as of January 1, 2008, cash receipts participants would be entitled to additional tax credit, i.e. the number of cash transactions (issuance of cash receipts) for each taxation year (temporarily issued until Dec. 31, 2010) multiplied by 20 won (Clause 10 of Article 121-3 of the Enforcement Decree of the Special Tax Treatment Control Act will be deducted from the tax payable. However, to be recognized as an eligible cash receipt, the amount of a cash transaction should be less than 5,000 won and the transaction should be made via Telebanking. This requirement makes it difficult for cash receipt users to receive the additional tax credit.

- (2) The cash receipt service provider shall transmit to the Director of the NTS details of cash transactions as set forth under the Presidential Decree, including transaction dates, amounts, and personal information of the buyers and cash receipt participants involved.
- (3) The ‘cash receipt’ referred to in clause (1) above means a receipt with payment details including transaction date and amount issued via the cash receipt printer to the buyer paid in cash for the good or service which was provided by the cash receipt participant.
- (4) If necessary to do so for the operation of the cash receipt scheme, including income deduction applied to the buyer who has been issued a cash receipt, the Director of the NTS may request personal information including one’s national ID number from the credit card information user (set forth under Article 2 of the Act) in accordance with Article 14 of the Use and Protection of Credit Information Act.
- (5) Any other matters required to be addressed for the operation of the cash receipt scheme, including methods of issuing cash receipts and forms, shall be determined by the Presidential Decree.

Enforcement Decree of the Special Tax Treatment Control Act (2005)

Article 121-3. ‘Input Tax Deduction for VAT’ applied to the cash receipt service providers. (1)The Cash Receipts Review Committee set forth in clause (1) of Article 126-3 hereof (hereinafter the ‘Cash Receipts Review Committee’) shall be affiliated with the NTS, and the Committee head shall act as the Vice Director of the NTS. The Committee shall be comprised of a maximum of three (3) private specialists appointed by the chief of the Tax Management Division of the Ministry of Strategy and Finance, the head of the Personal Income Tax Division of the NTS, the head of the Corporate Income Tax Division of the NTS, the Computerized Information Officer of the NTS, and the Director of the NTS.

- (2) The tenure of the private specialists (set forth under clause (1) above) as Committee member shall be 2 years.
- (3) The Cash Receipts Review Committee shall undertake reviews concerning the following issues:
 1. Designation of cash receipt service providers pursuant to clause (1) of Article 126-3 of the Act.
 2. The extent of tax credits that the cash receipts service companies are entitled to.
 3. Methods and time for transmission of information/data to be submitted by the cash receipts service companies to the Director of the NTS.
 4. The scope of details to be recorded in the cash receipts which are issued by the cash receipts participants (set forth in clause (1) of Article 126-3 of the Act) (hereinafter the “Cash Receipts Participants” within the meaning of this Article) in accordance with clause (3) of Article 126-3 of the Act.
 5. The scope of the information that the Director of the NTS may request from the credit card information users set forth in Article 2 of the Use and Protection of Credit Information Act, under clause (4) of Article 126-3 of the Act.
 6. The scope of payment cards which the buyers are allowed to use to collect their cash receipts.
 7. Other matters required to be addressed concerning the operation of the cash receipts scheme.

- (4) In addition to clauses (1) ~ (3) above, any matters regarding the formation and operation of the Cash Receipts Review Committee shall be determined by the Director of the NTS.
- (5) The ‘number of set-ups of the cash receipt printer set forth under the Presidential Decree’ referred to in clause (1) of Article 126-3 is indicative of the number of set-ups of the cash receipt printer that is newly installed by the cash receipt service provider on the existing credit card terminal in the workplace of the eligible cash receipt service providers (hereinafter the ‘Eligible Cash Receipts Providers’)(business owner subject to issuance of receipts’) set forth under clauses (1) and (2) of Article 79-2 of the Enforcement Decree of the Value-Added Tax Act
- (6) For the purpose of clause (5) above, if the cash receipts provider newly installed a cash receipt printer on two (2) (or more) credit card terminals in the workplace of the same eligible cash receipts provider, the number of set-ups shall be deemed to be one (1). In addition, the number of set-ups shall be deemed to be zero (0) if the cash receipt service provider newly installed a cash receipt printer on such credit card terminal using set-up software downloaded online without visiting the workplace of the eligible cash receipts provider, or if at the start the credit card terminal was provided, equipped with a built-in cash printer.
- (7) The ‘number of cash payments’ in clause (1) of Article 126-3 refers to the number of cash payments applied to the receipt of 5,000 won or more per transaction issued by the cash receipts participant via the cash receipts printer, subject to the transmission of the transactions to the Director of the NTS via the appropriate cash receipts service provider pursuant to clause (2) of Article 126-3 of the Act.
- (8) The ‘amount set forth under the Presidential Decree’ referred to in clause (1) of Article 126-3 of the Act indicative of any of the following amounts:
 1. Deductible based on the number of set-ups of the cash receipt printer, determined by the Director of the NTS, subject to the examination of the Cash Receipts Review Committee. In such case, the said Committee may adjust that amount within plus or minus its 30%, based on 15,000 won per machine set-up.
 2. Deductible based on the number of cash payments, determined by the Director of the NTS, subject to the examination of the Cash Receipts Review Committee. In that case, the said Committee may adjust that amount within plus or minus its 30%, based on 22 won per cash payment.
- (9) For any transaction involving a payment of 5,000 won or more, the cash receipts participants shall issue a cash receipt to the appropriate buyer in accordance to clause (3) of Article 126-3 of the Act.

2.3.3. Administrative Sanctions

In an effort to encourage credit card and cash-based transactions, the government granted various financial incentives including income deductions to consumers and various tax deductions to business owners. However, the incentives were not sufficient to offset the higher burden on the part of businesses to disclose income (sales). As such, businesses were less likely to participate by collecting and issuing cash receipts.

Along various tax incentives, the government continued to focus its efforts to promote user participation in the credit card and cash receipt schemes by implementing various ‘tax penalty’ schemes and the ‘reporter reward scheme.’

2.3.3.1. Additional Tax Penalty for Not Accepting Credit Card Payment and Excluding Violators of Other Tax Benefit Schemes¹¹

Since the government felt that the credit card designation scheme to promote user participation helped to alleviate some problems to a certain degree, it came up with the tax penalty scheme for business owners who refuse to issue credit card slips to increase payments with credit cards at substantial levels. Specifically, an additional tax penalty was imposed upon business owners who refused to issue credit card receipt or issued a credit card receipt that was inconsistent with the details of the transaction. This measure has been applied to sales generated after July 1, 2007. In the event of non-compliance, an additional tax penalty equivalent to 5% of the amount of each transaction was imposed when a credit card slip was issued. In the case of credit card slips with false information on the transaction, an additional tax penalty equivalent to 5% of the difference between the actual payment and the amount on the credit card slip was added to the final tax liability except when the difference was less than 5,000 won, in which case a flat penalty of 5,000 won was administered. Since this scheme applied to all user participants effective January 1, 2008, the government sought to reap the resulting synergies from the introduction of the new scheme with the existing credit card designation scheme. As such, the new provision was applied only to user participants who met the eligibility requirements.¹²

This measure sought to limit sanctions such as additional tax penalty if the companies quickly adopted the government’s policies in respect to the credit card and cash receipt schemes being operated.

Another objective was to make businesses more reliant on the scheme so that immediate adoption of the scheme worked for and not against the interest of businesses, relative to other business owners.

Furthermore, beginning on January 1, 2008, participating companies that refused to issue credit card receipts or engaged in the falsification of credit card receipts were not allowed to apply for simple expense rates.¹³ In addition, non-compliant companies were not offered various

11. The NTS, issued the following new release: “*Effective from July, disadvantages against violators of the obligation to issue cash receipts*” (10.4.2007)

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

13. Clause (7) under Article 143 of the Enforcement Decree of the Income Tax Act.

tax benefits including special tax relief/exemption for venture enterprises and special tax relief/exemption for small and medium-sized businesses.¹⁴ This policy sought to ensure that businesses did not try to avoid the use of the credit card scheme for tax evasion purposes while measures to enhance transparency in business transactions were being established.

An additional tax penalty equivalent to one of the following two amounts, whichever is greater, will be imposed upon refusal to issue a credit card slip:

- (1) 5% of (i) the amount per transaction on which issuance of a credit card slip was refused and (ii) the amount per transaction on which a credit card slip that carries false information regarding the transaction;
- (2) 5,000 won if the amount computed as a penalty base is less than 5,000 won per transaction.

2.3.3.2. Reward Program for Reported Cases of Refusal to Issue Credit Card Receipts.¹⁵

To facilitate the disclosure of taxable income, beginning on July 1, 2007, the ‘Reporting Reward Scheme’ was launched. Under the scheme, a reward of 50,000 won per transaction (maximum of two million per year) was given to a company that reported cases of a refusal to issue a credit card receipt or the falsification of credit card receipts. However, a majority of the reported incidents consisted of businesses refusing to issue credit card receipts on transactions with small amounts, reported by so-called professional reporters (also known as ‘watchdogs’). For this reason, the outcome of the scheme was unsatisfactory, and subsequently, resulted in a sudden increase of complaints by small and micro- businesses. In response, the government amended the enforcement decree of the Basic Law for National Taxes, which entitled such reporters to a reward amounting to 20% of the transaction’s amount reported, effective February 6, 2009. The following table outlines the revised criteria on reward payment, in general, the reward amount was made equivalent to 20% of the transaction’s amount. For reported transactions that were 10,000 won or less, a reward of 10,000 won was given. The reward limit of 50,000 per transaction, and 2,000,000 won per person per year remained unchanged.

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

15. 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.

Table 1-18 | Criteria for Rewarding Reported Incidents

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

2) The difference between the amount refused for slip issuance (or the amount on a slip issued but carrying false information) and the amount actually paid.

2.3.3.3. Additional Tax Penalty for User Participants Failing to Use the Scheme and to Issue Cash Receipts. Exemption Non-Compliant User Participants from Other Tax Benefit Schemes

Beginning on July 1, 2007, business that qualified under the cash receipt scheme but did not comply by failing to become a user participant within a prescribed time period¹⁶ were penalized with an additional tax of an amount equal to 5% of its final tax liability for sales reported during the period of non-compliance.⁷ The period of non-compliance was defined as the day after the participation deadline and the day before participation for sales within this period that were eligible for cash receipts. This additional-tax penalty scheme for failure to participate sought to rapidly establish a system to improve transaction transparency in line with the changing phase of business enterprises.

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 user participant of the credit receipt scheme did not comply by issuing a cash receipt or falsified information, 5% penalty was applied on the difference between the stated and actual purchase amount for every transaction in both cases (a penalty of 5,000 won if

16. Submission deadline for application to become a cash receipt participant (Clause (4) under Article 210-3 of the Income Tax Act).

(1) March 31 of the corresponding year for the businesses providing a product or service directly for the consumers (except professional service providers and hospitals/clinic) and whose total sales amount to 24,000,000 won or more.

(2) Within 3 months after the date of application for business registration in the case of professional service providers, hospitals/clinics.

the transaction amount is less than 5,000 won). In addition to this, effective on January 1, 2008, participants that did not comply were excluded not only from the simple expense rates,¹⁷ which can be claimed when filing a total income tax return, but also from various tax relief and exemption schemes,¹⁸ including special tax relief and exemption for venture enterprises and special tax relief/exemption for small and medium-sized businesses.

2.3.3.4. Reward Program for Reported Cases of Refusal to Issue Cash Receipt¹⁹.

The reward program sought to encourage the reporting of cases when user participants did not issue cash receipt. Starting in July 1, 2007, a reward of 50,000 won for each case was offered to anyone that reported an incident where a cash receipt was not issued or information on the cash receipt was falsified. Recently, the fixed rate was replaced by a fixed percentage method (20% of the amount reported) to calculate the maximum reward amount in order to encourage active usage of this program²⁰.

3. Scheme Promotion Procedures

3.1. The Credit Card Income Deduction Scheme

The ‘credit card income deduction’ scheme was implemented to encourage the active use of credit cards as a form of payment by salary income earners as a way to improve the transparency in the calculation of income of business owners, to achieve a more equitable taxation between salary income earners and business owners or self-employed workers by reducing the tax burden of salary income earners. To this end, effective on 1994, the government implemented the input VAT deduction scheme for sales transacted with a credit card. This measure resulted in an overall improvement in the credit card market in terms of user participation.

Meanwhile, the government constantly reviewed the credit card income deduction scheme to improve transparency on the income sources of business owners or self-employed workers. After the financial crisis in 1997, which resulted in the worsening of wealth distribution, the

17. Clause (7) under Article 143 of the Enforcement Decree of the Income Tax Act.

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

19. 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.

20. NTS news release “The cash receipts reward program to change” (10.2.2009)

government encountered strong public demand to raise the level of transparency in income tax reporting from relatively low levels of transparency. Under the circumstances, the strong support of civic groups helped the government come up with specific strategies in implementing the credit card income deduction system.

Specifically, the government implemented two strategies at the same time, as a means of encouraging user participation by consumers or salary income earners. First, any impediments on using credit cards from a consumer's viewpoint were removed. Second, the anticipated gains of the scheme were provided to credit card users. To this end, the government launched a system which required every business enterprise adopt the payment system of credit cards to ensure that consumers had no difficulties in using a credit card. To minimize resistance of the scheme and the cost burden to taxpayers, the government adjusted the scope of the eligibility for input VAT deduction based on credit card sales (300 million won to 500 million won sales). Second, by inducing consumers to use credit cards, it in turn led businesses to disclose their source of taxable income. Then, the credit card income deduction scheme was launched, which the government believed would help ease the controversy regarding inequity within the context of taxation which has been continually addressed by interest parties.

Additionally, even though the government analyzed credit card programs in advanced countries including the U.S., it has never implemented any policies supportive of active use of credit cards in the past. In the case of the U.S, credit card transactions account for only about 15% of total economic transactions. And it provides low levels of user friendliness because such businesses as hospitals and restaurants work with different credit card companies.

To ensure consumer's convenience in using credit cards, the government promoted, in consultation with the Financial Supervisory Service, the use of a shared network for credit cards (launch in 1.9.1999) under which consumers can use their credit cards when making a payment to other credit card 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 would help improve transparency in commercial transactions.

Meanwhile, there was resistance on the part of the public to the use the income deduction scheme for sales payments in credit cards, as many believed that the policy was intended to benefit credit card service companies. To address these policy concerns, 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, after analyzing their profit structure, by reinforcing its administrative guidance on reducing credit card commission rates. Along with this action, the government

managed to garner 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 reducing the costs associated with credit card membership fees. For example, the government demanded credit card terminal providers to reduce their unit price of such terminals.

Regarding specific policies under the scheme, minimum requirement of 10% of one's total salary was set as eligibility criteria for taxpayers to qualify for tax deductibles for credit card purchases. This was because when the system first began, the average amount of credit card purchases already reached such a level. Also, by setting the maximum limit for tax deductibles as 3,000,000 won, the government sought to prevent an excessive decrease in tax revenues as a result of introducing the scheme.

In using credit cards, if the existing commission fees involve setting a higher price for the same product or service that the consumers would have paid if they made a payment via cash, such practice might impede the active use of credit cards. Taking this problem into account, the government banned optional-pricing and attempted to encourage active use involvement by implementing the reporter awards program which is intended to reward the reporters of an incident of refusal to receive credit card payments.

Such government efforts and strategies to improve transparency of the income source of business owners gained positive responses from the National Assembly during the legislation process of policies. First of all, both of its objectives - supporting salary income earners and enhancing the transparency of businesses' income sources - were consistent 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 employers. The government gained the public's consent relatively easily due to the given special economic circumstances, i.e. the 1997 financial crisis, but usage cases in advanced countries show that a careful approach is necessary if such programs are implemented in other countries. One good example is the unlimited access to information on the usage of credit cards by the Director of the National Tax Service in Korea. This practice may violate one's basic rights, privacy. If the government used the information on credit card usage for other purposes or disclosed it to a third party, the government might end up facing serious public resistance to its policies in respect to the system. Obviously, the government should take extra precautions to keep such information strictly confidential.

3.2. The Cash Receipt Scheme

After 1999, in line with its various strategies to promote the use of credit cards as a form of payment by consumers, the government managed to enhance, to a certain degree, transparency in the income sources of businesses of a prescribed size. But, the absolute figure of sales via credit cards 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 consumer consumption expenditures. There was an overall negative response as to whether the high rate of cash transactions to the total civilian consumption expenditures could be reduced through the government's policies of promoting credit card usage. The relatively high rate of cash transactions was attributable to the size of owner-operators which accounted for a relatively greater portion of total businesses. Also, these businesses preferred cash transactions due to the cost burdens associated with credit card transactions such as credit card commission fees. Also, it was difficult for the government to make businesses adopt the payment system of credit cards solely through administrative guidance including the National Tax Service.

In addition concerns of tax inequity between salary income earners and owner-operators, the government was compelled to come up with a system under which cash transactions are facilitated by a third party to help improve such tax inequities and brought more transparency on owner-operators with high incomes. This led the government to introduce (2005) the cash receipt 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 the unused portion of credit amount while reducing cost burden of businesses of transacting in credit cards - credit card commission fees - which was increasing with the growth of credit card usage. 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. Thus, the government established a cash receipt scheme by leveraging know-how from the private sector. Prior to the launch of the scheme, the government had a number of discussions with private companies including credit card service companies and VAN. Then, it made a decision to add a print function to the existing credit card terminals rather than build a separate machine to print receipts. That is, under the newly devised system, VAN was to transmit cash transaction information online to the NTS the same way that it transmitted such information to credit card companies. This strategy significantly reduced the costs associated with the cash receipt system, giving owner-operators some merit.

The cash receipt scheme was created in September 2004, which was followed by a pilot program from November 16 to December 15 in the same year. Effective on January 1, 2005, the scheme 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 receipt

scheme under which all participating consumers were entitled to tax relief/exemption if eligible. First of all, the government revised Article 32-2 of the Value-Added Tax Act so that cash receipts were treated the same as credit card receipts. This strategy sought to alleviate the burden of disclosing the sources of income on the part of cash receipt user participants by allowing 1% of cash receipts (covered in issued credit card slips) to be tax deductible from input VAT. In addition, new provisions which governed tax relief/exemption for consumers and cash receipt service companies were added to Article 126-2 and 126-3 of the Special Tax Treatment Control Act. Article 126-2 prescribed that consumers were entitled to income deduction based on cash receipts, in the same manner salary income earners were allowed 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 a debit card), which was higher than the deductible rate applicable to credit card payments. However, in the course of examination by the Finance and Economy Committee of the system, it was agreed that tax equities between all payment means should be maintained, including credit card and debit card. As such, a unified deductible of 20% was set to be applicable to cash receipts, credit card and debit card slips. Article 126-3 prescribed that the deductible rate for input VAT shall be based on the number of cash receipt printers installed by the cash receipt service companies, and the number of cash transactions processed via the printer, with the aim to establish expediently the infrastructure to support issuance of cash receipts.

Thereafter, the government has been constantly improving its various policies and strategies supporting the cash receipt scheme, various economic activities change over time so that the scheme can be operated cost efficiently to enhance transparency in the reporting of the sources of taxable income.

4. Evaluations

There are hardly any research results or individual analysis discussing the outcome of the credit card and cash receipt income deduction scheme in Korea. This is because available data is insufficient to perform economic analysis on the factors contributing to selecting a payment means in commercial transactions. Therefore, the outcome of the credit card and cash receipt income deduction scheme can be examined only through indirect indicators.

The effect of the schemes can be verified by the number of credit card and cash receipt transactions. Even though there are no clear causal linkages that can attribute the increase in non-cash transactions to the scheme and that can account for the impact of Korea's economic development on changes in form of payment, it is possible to estimate the overall level of

transparency in commercial transactions. For the transaction details, including credit card transaction details, which are verifiable through a third party, the study relied on the Bank of Korea's data which contains credit card transaction information before 1999 when the credit card income deduction scheme was not yet launched. The total credit card transactions amounted to 24.1 trillion won in 1997 and mildly increased to 24.7 trillion won in 1999 after the economic crisis. With the inception of the income deduction scheme on a full scale, credit card transactions continued to increase rapidly till 2002 when it amounted to 15.20 trillion won, which was fell to 141.8 trillion won in 2003 after civilian consumption was controlled due to excessive credit permitted. 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 rate of increase to as high as 51.2% in 2009.

It can be concluded that the significant increase in credit card transactions was greatly affected by the change in government tax policies. This indicates that tax incentives were instrumental in the quick adoption of credit cards as a form of payment, in addition to the impact of the country's economic development on the growth of credit card usage.

Figure 1-2 | Trends in Credit Card Transactions vs. Private Consumption Expenditures

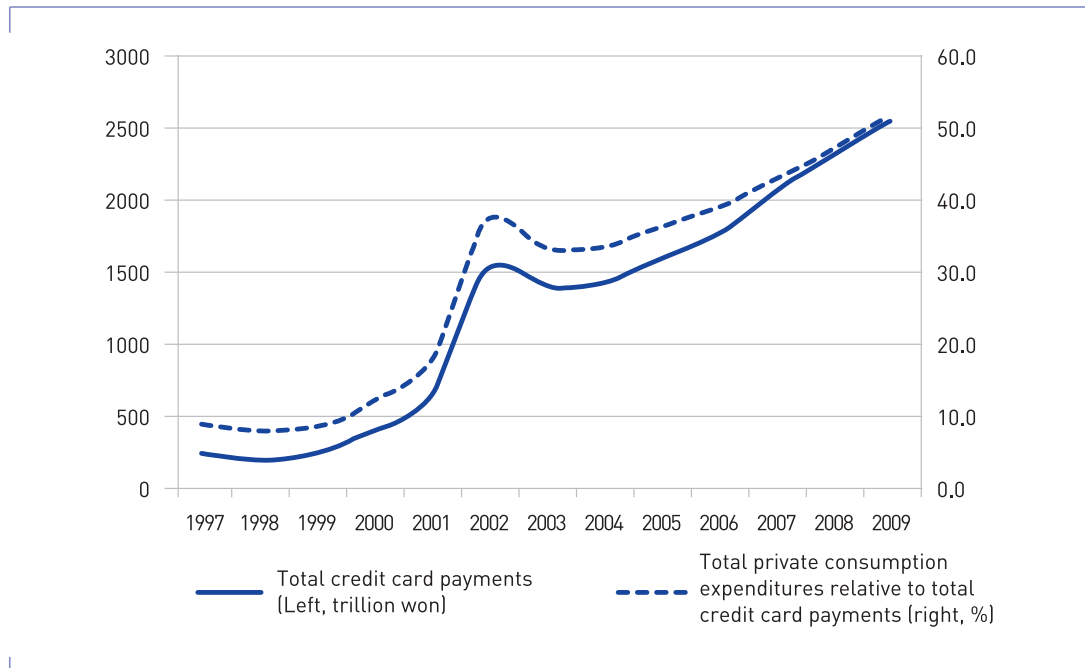


Table 1-19 | Pattern of Korea's Industrial Structure

(Unit: 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
Share 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	2,631.0	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	
Share 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: Credit card transactions account for sales and installment plans of credit card payments by individual persons.

Sources: 1) Credit card transactions from the CREFIA.

2) Credit card transactions from the BOK.

3) The amount paid via a debit card or check card from the BOK. This amount excludes the amount paid via a prepaid card.

4) Total cash receipts from the NSO.

As the use of credit card and cash receipts contributed to enhancing the reporting of income sources, the scope of business income reported and the tax revenues from each income source also grew. The rate of reported general income tax, 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. In the early to mid 2000s, it continued to increase. Since 2003, when there was a problem with excessive use of credit cards, it showed a relatively slower growth, but began to increase again at a greater rate from 2006. The rapid increase of the final tax return rate in 2006 can be attributable to improvements in the administration of tax to prepare for the introduction of the earned income tax credit.²¹ However, it appears to have been influenced by continued efforts to enhance the transparency of tax resources. Also for the average income tax determined amount, despite the continuous dropping of income tax rates²² (1994, 1996, 2002, 2005), it has shown continued growth. In the case of determined tax amount for income taxes, various factors such as tax bracket, tax rate, and increased income have had an effect, but it is presumed that the increased income due to more transparent tax resources had a considerable effect on this.

Table 1-20 | Trends in the Number of Year-End Tax Settlement Cases

Taxation year	Taxable income (A)	Final reporting (B)	Determined tax amount (C)	Determined tax amount per person	Rate of final reporting
	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

21. The payroll tax incentive scheme is a refund-based tax deduction system under which a tax refund is provided for households with children and a total income of 1,680,000 won or less. The government pursued the launch of the scheme for 2007, but the scheme finally began in 2008. With the launch of the system, the government strengthened its tax policies to support low-income workers and it is concluded that such efforts have contributed to enhancing transparency of the income source of employers who hire such workers.

22. The government implemented changes in its income tax brackets and income tax rates as follows: 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%).

Taxation year	Taxable income (A)	Final reporting (B)	Determined tax amount (C)	Determined tax amount per person	Rate of final reporting
	Person	Person	100 million won	(C/B, won)	(B/A, %)
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).

The rate of user participants under the credit card scheme, which serves as one of the indicators of the level of transparency in commercial transactions, rose significantly in 2008 compared to July 1997 when the government made participation mandatory. Such significant increase was found across all business types, in addition to an increase rate of 32% with retaining businesses, making 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 hospitality sector, over 95% of eligible credit card participants have now become a participant with the active administrative guidance by the government.

Table 1-21 | Rate of User Participation in Credit Card Scheme

(Unit: business, %)

Category	Total		Retail		Restaurant & Accommodation		Services		Others	
	July 1999	Dec. 2008	July 1999	Dec. 2008	July 1999	Dec. 2008	July 1999	Dec. 2008	July 1999	Dec. 2008
Designated business as eligible	31,544	880,298	10,907	360,735	901	262,518	1,595	252,704	2,537	4341
Participants	23,100	745,126	5,333	291,489	713	249,564	1,070	201,064	1,719	3027
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 as of July 1999 consists of only 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).

Today, the cash receipt scheme which began in 2005 also shows a significant increase in the number of participants since the early stages 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 found in the credit card scheme for the same year. Such a high rate is attributable to the NTS's administrative efforts focused on encouraging active user participation in the cash receipt scheme. The other contributing factor is that, unlike the credit card market which is operated by private markets, the cash receipt scheme is operated by the NTS for taxation purposes.

Table 1-22 | Rate of User Participation in Cash Receipt Scheme

(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

Notes: 1) The reason why 1995 (the year of inception) was excluded for comparison is because data from the years involved contain the number of credit card participants.

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

The financial cost amount, which is equivalent to the cost of the credit card and cash receipt system, also increased greatly together with the expanded application of the policy. The tax revenue reduction effect from income deductions from amounts used through credit cards, which is the most typical expense, was around 1.8 trillion won as of 2009. Tax revenue reduction 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 has once again accelerated since 2007.

The decrease in tax revenues of support policies aside from income tax deductions based on credit cards, etc is also quite considerable. In particular, the decreased tax revenue of VAT deductions for business owners that were allowed to promote use of credit cards, has maintained a 1.1 trillion won level in 2008. The tax deduction effect for increased income that is permitted for legalization of other standards of assessments is not very large being about 37.4 billion won

as of 2008. Therefore in the future, efforts to improve efficiency of overall operation of the VAT tax deduction policy permitted to business owners in concert with income tax deductions for used amount through credit cards will also be needed.

Table 1-23 | Decrease in Tax Revenues Resulting from Tax Deductions Based on Credit Card or Cash Payments

(Unit: business, %)

Year		Year	
	Amount		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 ^P	18,460

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

Table 1-24 | Decrease in Tax Revenues depending on the Type of Tax Benefits Schemes

(Unit: 100 million won)

	2008	2009 (tentative)
Income deduction based on credit card payments	15,171	18,460
Tax deduction based on sales (income) for rationalizing the tax base	386	374
Input VAT deduction based on credit card payments	8,451	10,559
Total	24,008	29,393

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

5. Policy Recommendations

The successful implementation of the tax deduction scheme associated with credit card and cash payment receipts can be summarized by the following two points. First, the scheme sought to establish a solid foundation that was supportive of the active use of credit cards and cash receipts. The government made great efforts to attain success in the operation of the credit card and cash receipt income deduction scheme, which focused on two major strategies. Even prior to the inception of the scheme, the government devoted its energies to motivating active user participation. 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, tax specific benefit policies and schemes applicable to different

types of businesses. The outcome of these two strategies provided the basis for enabling many additional businesses to adopt the use of credit cards and cash receipts for commercial transactions.

The other strategy sought to secure the public's acceptance of the scheme by combining various government policies and strategies related thereto. Apart from the provision of an incentive for consumers to use credit cards and cash receipts in transactions, the government succeeded in raising the level of the public's acceptance of the scheme by granting the sellers tax deduction allowances that offset increases in transaction costs and tax burden. The government has been able to improve the scheme's overall acceptance by interested parties through lottery programs that was 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, the government induced taxpayers to comply with the scheme by provisioning various administrative sanctions including the 'additional tax penalty program' and the 'reporter rewards program.'

Therefore, when this income deduction scheme is reinstated, taking into account the two strategies stated above, it is necessary to expand and complement the existing foundation to support 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 to ensure compliance. 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 considerations. The public's apprehension to collection of their transaction information (including credit card and cash payment receipts) by tax authorities is also considered important given that this might negatively affect the government. A strong belief to protect privacy rights would make it difficult to implement the scheme. Such an institutional environment can be improved over time through strategic government campaign targeting interest groups, yet it is crucial to examine the likelihood of such pushback 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 scheme. This is crucial for the review of the process of reforming the scheme. In general, it is extremely difficult to abandon the tax relief (exemption) scheme due to 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 scheme.

References

Korean National Tax Services (NTS), *NTS's 40-Year History*, (2006).

NTS, *National Tax Statistics* (for the years involved).

NTS, various news releases (for the years involved).

Ministry of Strategy and Finance in Korea, *Tax Expenditure Reporting* (for the years involved).

Ministry of Government Legislation in Korea, the Korea Law Service Center website (2010).

National Statistical Office, the e-National Indicators website.

The Bank of Korea, the ECOS System website.

Experience of Earmarked Taxation for Development Resource

1. Background for Introduction
2. Details
3. Implementation Methods
4. Assessment and Implications

Experience of Earmarked Taxation for Development Resource

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<Summary>

An earmarked tax is a tax whose revenues are required to be devoted to a specific public expenditure. This tax could offer a better policy alternative if a developing country has to concentrate on a particular project or activity driven by the government as it can garner a higher level of acceptance among the taxpayers and it is a way to secure funds for a specific expenditure. The central government of the Republic of Korea (“Korea”) has imposed such earmarked taxes, inter alia, in the form of a transportation tax, education tax and rural development tax, among which the transportation tax is cited as the most successful example. The transportation tax is levied on gasoline and diesel fuels. Since gasoline and diesel are primarily used as fuels for modes of transport, the revenues of the transportation tax could be used for the purpose of expanding transportation facilities.

The growth of Korea’s economy in size and the improvements in standard of living achieved in the 1980’s led to increased demand for transportation services. This, however, was not matched by sufficient investment in roads, conventional and urban railroads, ports, airports and other transportation facilities. As a result, the costs of increased traffic volume and congestion emerged as impediments to social and economic advancement. In response, the Korean government introduced the transportation tax in late 1993 to secure a source of revenue and consolidated a number of special and general fund projects into the “Special Fund For Transportation Facilities.”

As of 2009, revenue collected from the transportation tax amounted to 10.1 trillion Korean won, accounting for 6.1% of the total national tax revenues. Although the revenue was entirely

credited to the Special Fund For Transportation Facilities in the beginning, it has also been used for environmental improvement and energy-related projects since 2007. As such, 80% of the revenue is being directed to the Special Fund For Transportation Facilities which is used to make investments in building and maintaining roads, railroads, airports, mass transit (including urban rail), ports, and regional and other transportation systems.

The transportation tax and the Special Fund For Transportation Facilities have greatly contributed to the expansion of Korea's transportation facilities. Nearly a decade of the introduction of the transportation tax has led to the growth in capacity of: four-lane or wider roads by 3.79 times, tolled freeways by 1.87 times, double-track railroads by 1.27 times, ports by 2.64 times, and airports by 1.51 times, compared to 1990 figures.

Despite these achievements, the question of whether Korea has sufficient capacity in transportation facilities remains controversial, resulting in debate on whether the transportation tax should be maintained. At the time of its introduction in 1995, the transportation tax was implemented as a temporarily tax which was to be levied until 2003; but it was extended by three years in 2003, 2006 and 2009. Each year the tax was to expire, it became a controversial issue causing much heated debate between those that believed Korea's transportation infrastructure was poorer than developed countries and thus maintaining the earmarked tax was warranted, and those that believed the tax caused nonflexible budget allocation and potential waste of funds and therefore should be reverted to general excise taxes.

Korea's experience with the transportation tax may help a developing country, which seeks to secure substantial funds to finance government-initiated development projects, understand the pros and cons of earmarked taxes as a way to secure a source of revenue in an effective manner.

1. Background for Introduction

1.1. The Significance and Roles of Earmarked Taxes

As the phrase "earmarked tax" is more of an academic term than a legal or administrative one, it is difficult to choose exactly which tax items to include. Indeed, few international organizations provide relevant statistics by country. Simply, it is understood as a tax whose revenues are earmarked, or set aside, for a specific public expenditure. The modern public finance system separates, in principle, tax revenue and government expenditure. In other words,

taxpayers have the obligation to pay taxes regardless of the level of benefits from or satisfaction with government projects. Moreover, tax rates are determined regardless of how the government distributes funds or who has paid how much of what taxes.

Although the history behind the separation of tax revenue and expenditure may be explained in a number of ways, there is arguably a certain sense of inevitability to it, considering that one of the most critical roles of the government is the provision of public goods. Public goods benefit all members of society and have non-excludability property no particular person can be effectively excluded from the service. It is, therefore, practically impossible to precisely identify beneficiaries or make accurate measurements of the level of benefit, leaving the government no option but to unilaterally provide public goods and to collect revenues independent of expenditures.

Therefore, the earmarked tax is an exception to the rule of separating revenue and expenditure. However, it is somewhat universally accepted; in that, most countries have earmarked taxes. It should be noted in particular that the earmarked tax has both merits and demerits, resulting in varying or even conflicting assessments depending on the particular situation and stance. The purpose of this article is to introduce the experience of earmarked taxation designed to secure a source of revenue for development and to assess its outcome. Achieving this purpose may require a look into what characteristics earmarked taxes possess and what effects these taxes have brought about in specific cases.

One of the most important, if not the most, criteria in assessing an earmarked tax is whether there is enough of a linkage between a particular source of revenue and a particular type of expenditure to justify it as an earmarked tax.¹ Although a number of criteria for assessing the degree of linkage may be proposed, the ‘benefit principle’ (or beneficiary pays principle) and the ‘polluter pays principle’ are most often mentioned. The ‘benefit principle’ dictates that those who benefit from government expenditures also pay for their cost, while the ‘polluter pays principle’ mandates that those who give rise to the need for government projects or activities also pay for their cost. These principles alone could be accepted as good criteria for taxation with no particular expectations, so long as the public accepts the argument that it is natural and fair for the beneficiary or polluter of the government expenditure to also pay for it, if possible. Economics, however, puts emphasis on the efficient allocation of resources, based on the theory that resources shall be allocated in such manner to maximize the net benefit (benefit minus cost) if those paying for the benefit are required to share its cost and freely determine the level of benefit (the size of government projects).

1. In fact, the linkage between a source of revenue and expenditure is the very definition of the earmarked tax.

One notable thing is that the scope of earmarked taxes may be significantly extended, if seen from the perspective of the association between a particular source of revenue and a particular type of expenditure. For example, dues, charges, fees, pension contributions and other imposts are compulsorily collected by the government, where most of these are paid in consideration of the benefit from public projects and spent for particular public projects. In certain circumstances, therefore, these dues, charges, fees and pension contributions are inclusively referred to as earmarked revenues.

It is often, however, practically difficult to strictly apply the ‘beneficiary pays’ and ‘polluter pays’ principles to the earmarked tax if we exclude dues, charges, fees and pension contributions. In other words, the earmarked tax is conceivably situated somewhere between where the ‘beneficiary pays’ and ‘polluter pays’ principles are well adhered to as in the case of dues, charges, fees and contributions, and where revenue and expenditure are independent of each other as in the case of other taxes.² It should, therefore, be noted that the argument that an earmarked tax established under the ‘beneficiary pays’ and ‘polluter pays’ principles will enhance the fairness of taxation and contribute to the efficient allocation of resources, can be hard to accept in practical situations.

The earmarked tax also has a characteristic that it should be discussed in conjunction with special and trust funds, as the use of general funds cannot secure the minimum amount of a particular type of expenditure. The establishment of an earmarked tax, therefore, causes changes not only in the taxation structure but also in the budgeting structure. Special funds, as opposed to the general fund in which funds are distributed in accordance with the priorities of government projects on an annual basis, may allow a stable provision of government resource, enhancing the continuity and predictability of a project. To be sure, there is a tradeoff. For instance, even if there is a change of budget allocation, the earmarked tax may hinder a change in the distribution of funds. The rigidity of an earmarked tax readily manifests itself well after its introduction. For this reason, an earmarked tax is often introduced as a tentative measure.

The practical reason for the extensive use of earmarked taxes is probably its potentially higher level of acceptance among taxpayers. Assume, for example, that all tax revenues are entirely used on general government activities. In this scenario, taxpayers are rendered incapable of perceiving how and where their tax payments are used, possibly resulting in a higher level of resistance to taxes. In contrast, if the funds paid by taxpayers are expressly used in a particular sector, especially in a sector with high political support, then they will be willing to accept the taxes.

2. The very distinction between taxes and dues, charges, fees and contributions is also often ambiguous. A single source of government revenue may be classified as a tax (earmarked tax) in one country and as a fee or contribution in another.

Table 2-1 | Pros and Cons of Earmarked Taxes

Pros	<ul style="list-style-type: none">• Higher predictability for the project: At least a minimum amount of funds is guaranteed, making it easier to achieve the purpose of the project.• Reduced volatility in budgeting• A higher level of acceptance of taxation• May enhance collection efforts from the applicable sector.• The sharing of costs is visible, resulting in higher levels of transparency.• May enhance the efficiency of resource allocation if the ‘beneficiary pays’ principle is used.• The financial risk in one sector does not affect other sectors.
Cons	<ul style="list-style-type: none">• It is difficult to make budget adjustments on an annual basis.<ul style="list-style-type: none">- Partitioned management of funds.- Impossible to quickly adjust the levels of funding for different projects.- Potential for excessive provision of particular public goods• If expenditure is legally guaranteed to a certain extent, this may lead to less effort to verify the outcome of the project and possibly lax financial administration.• A large number of special and trust funds complicates the budget structure and reduces transparency.• May be prone to abuse as a means to increase revenue.• Reduced budgeting authority of the executive and legislative branches

Source: Gi-baek Park, Sang-won Park and Won-ik Son (2007), p.26.

Granted, the acceptance of the tax among taxpayers sometimes produces another side effect. In other words, the government may be tempted to use earmarked taxes as an easy means to simply increase revenue. In particular, there is a tendency to introduce an earmarked tax, promising that the increased tax burden will only be temporary, and then extend or perpetuate the tax when it expires. This case would justify the criticism that the earmarked tax has been introduced with the sole purpose of reducing taxpayers’ resistance to a new tax or an increase in the tax rate. Table 2-1 summarizes the pros and cons of the earmarked tax as discussed above.

A developing country requires vast amounts of funds for government-initiated development projects. This sharply contrasts with the greater percentage of expenditures allocated to welfare in developed countries including measures for aging population. Parenthetically, the policies of developed countries for aging population are focused on the establishment of public pensions, which require the cost of funding it to be paid in advance (contributions) by future beneficiaries. In other words, the ‘beneficiary pays’ principle is well adhered to, making it relatively easy to create a source of revenue. In contrast, the smaller size of the economy, poor sources of revenue and a higher level of uncertainty for investment in a developing country almost always renders it difficult to secure a source of sufficient revenue. If it is necessary for a developing country to make concentrated investments and expenditures in a particular set of projects, but it is difficult

to obtain a source of revenue required, the earmarked tax can offer a sufficiently attractive means of securing revenue.

Korea presently administers a transportation tax, rural development tax, education tax and other earmarked taxes.³ The liquor tax and tobacco tax may also be classified as earmarked taxes since all or part of the revenues collected are directed to special funds. This article intends to remain focused on the transportation tax, since the pros of the earmarked tax as discussed above are deemed to be more conspicuous than other taxes, and investments in transportation facilities are generally required during a country's development phase. Furthermore, the education tax and rural development tax have very complicated revenue structures, reflecting certain historic and political precedents specific to Korea, and therefore, serve as good examples that may be applied in other countries.

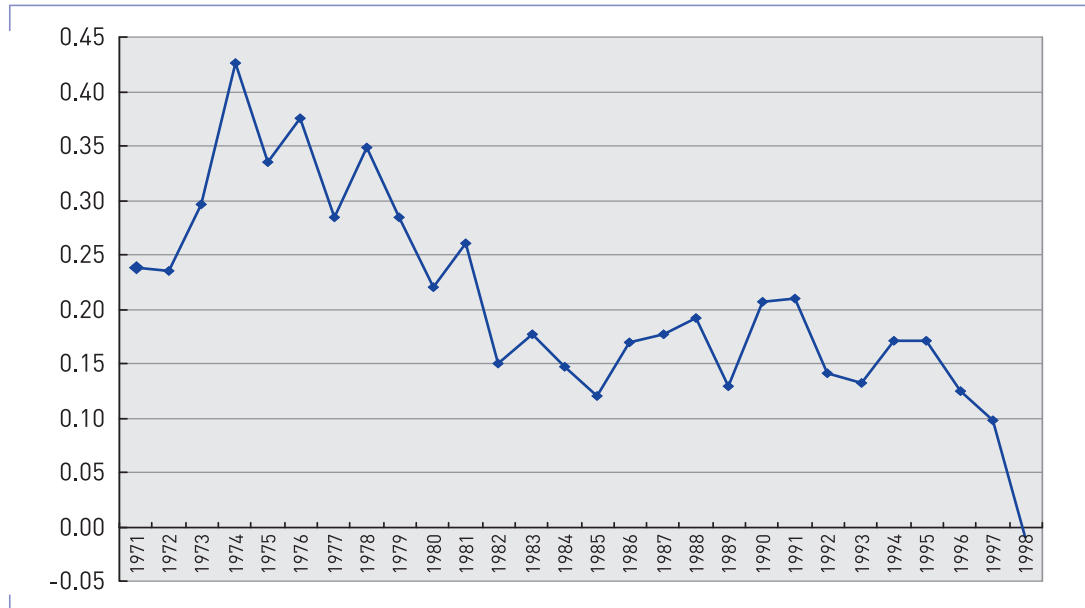
1.2. Economic and Financial Environment of the 1980's

During Korea's rapid economic growth in the 1980's, the transportation tax and the Special Fund for Transportation Facilities were introduced to fund infrastructure investments. Insufficient transportation facilities, in particular, led to greater social costs, requiring greater investment in transportation. To appropriately understand the background for the introduction of the Special Fund for Transportation Facilities, it first requires a look into why investment in public transportation facilities had been insufficient in the 1980's.

During the period from the late 1960's to the late 1970's, Korea achieved unprecedented economic growth. The strong government-initiated development strategy symbolized by the Five-Year Economic Development Plan achieved such great successes that the average annual real growth rate of GDP throughout the 1970's reached 10.3% (see Fig. 2-1). In particular, from 1976, rapid export growth and the construction boom in the Middle East helped produce unprecedented prosperity, but of course, this did not come without a number of disparities. In particular, external shocks such as the second oil crisis of 1979 demonstrated that the foundations of the Korean economy were fragile. Therefore, the primary objective of the economic policies of the 1980's was to overcome the negative effects of rapid growth and to achieve sustainable growth while maintaining stability. This was a strategy that may be deemed to have been successful on the whole.

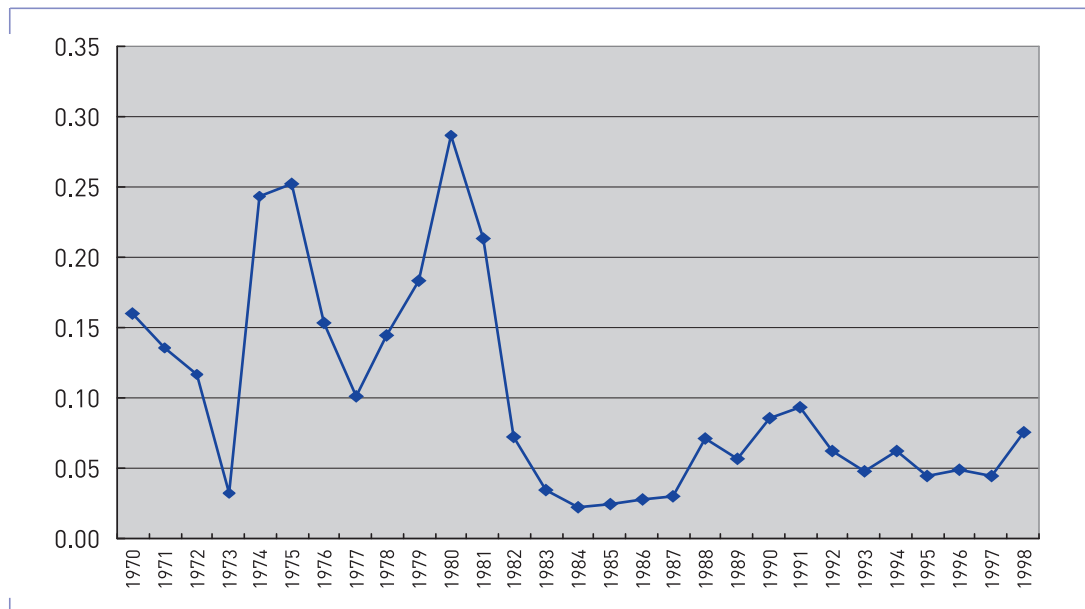
3. The transportation tax was renamed the transportation, energy and environmental tax in 2007. This paper, however, will use the term 'transportation tax' to maintain consistency.

Figure 2-1 | Rate of Increase in Nominal Gross Domestic Income



Source: The Bank of Korea.

Figure 2-2 | Rate of Growth of the Consumer Price Index (relative to 2005)

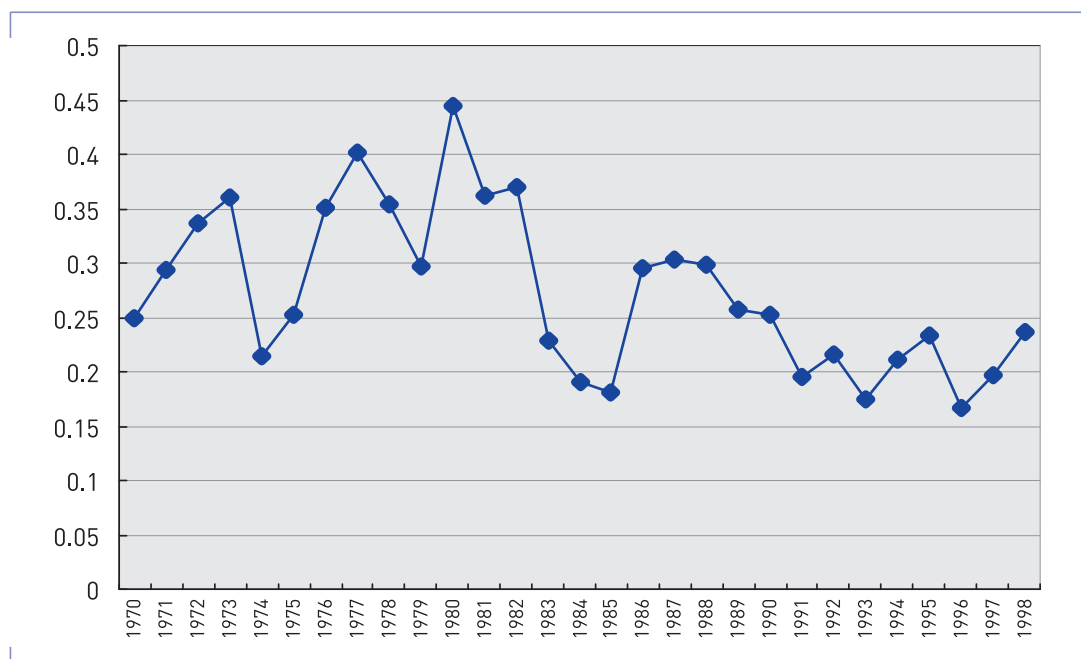


Source: The Bank of Korea.

Particularly, one of the economic policy imperatives of the 1980s was to maintain reasonable price levels. As shown in Fig. 2-2, the first and second oil crises were accompanied by a surge in prices, resulting in a sharp rise of 28% in the consumer price index in the early 1980s. In response, the government focused on price stabilization by implementing aggressive financial and fiscal retrenchment policies. Price stabilization policies materialized as: fiscal austerity measures aimed at budget cuts and more efficient use of government expenditures; conservative monetary and financial policies that led to a reduction in the total money supply (M2); and wage stabilization and income policies through intervention in the labor market.

Fig. 2-3 illustrates the changes in the rate of increase in M2. The rate of increase in the total money supply fell to 0.2% for the first time in 1984 and remained under 0.3% thereafter. The tight monetary policy may also be seen in the amount of the consolidated government budget as shown in Fig. 2-4. The rate of growth of the government’s consolidated budget remained under 15% during the early and mid-1980, a sharp contrast to the 30%-40% rates found in the 1970’s.

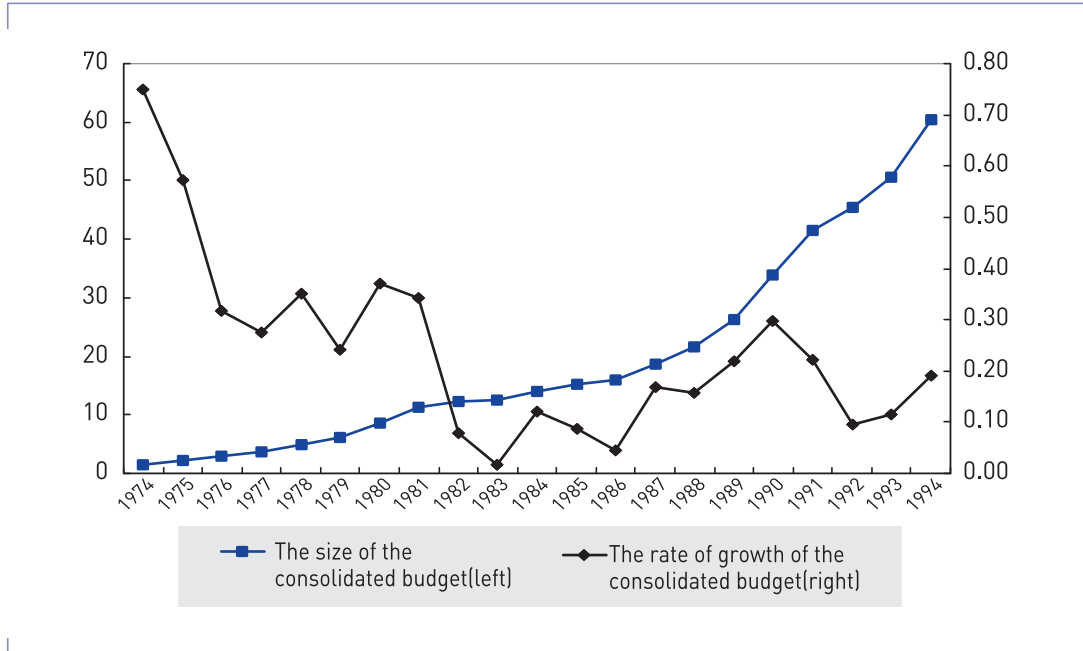
Figure 2-3 | Rate of Increase in Money Supply (M2)



Source: The Bank of Korea.

Figure 2-4 | The Size of the Consolidated Budget of the Central Government

(Unit: trillion won)



Source: The Ministry of Strategy and Finance.

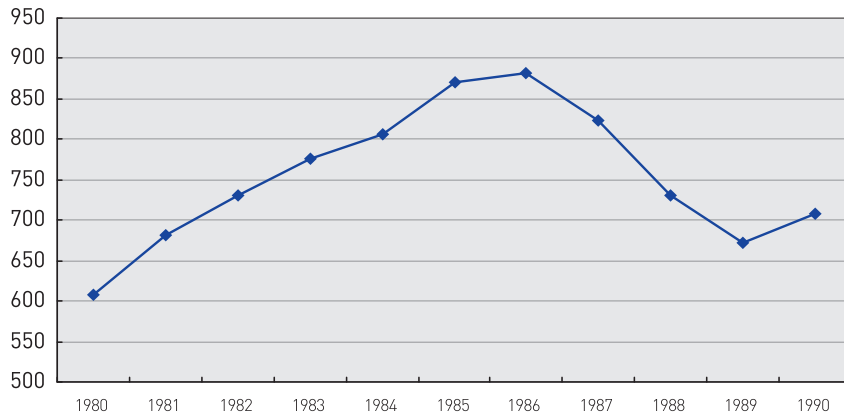
Despite these monetary and fiscal retrenchment policies, the economy did not cool down rapidly but grew instead. This has commonly been attributed to what has been called the ‘three lows’ phenomenon, which lasted from 1986 to 1988. The ‘three lows’ phenomenon refers to low interest rates, low exchange rates and low oil prices prevailing at the same time, being conducive to the Korean economy.

Suffering from budget and trade deficits, the United States allowed the dollar to devalue, resulting in the weak dollar. As shown in Fig. 2-5, the weak US dollar since the mid-1980’s translated into a strong Japanese yen, which afforded Korea, then in competition with Japan in the international export market, current account and trade surpluses. A low interest rate environment resulted as a number of countries lowered their interest rates in the wake of the second oil crisis, a windfall for Korea which had chronically been burdened with foreign liabilities. In December 1985, the OPEC members abandoned the fixed oil price system and started to compete to gain market shares, resulting in low oil prices. Oil price declines imparted the Korean economy, which was importing all crude oil supplies required by it, the benefit of production cost savings, serving as a factor for price competitiveness in the export market.

Fig. 2-7 illustrates that the Korean economy, which had had chronic trade deficits, was posting surpluses from the mid-1980 with the help of this three lows before they turned negative during the 1990’s.

Figure 2-5 | Average Annual Korean Won to US Dollar Exchange Rate

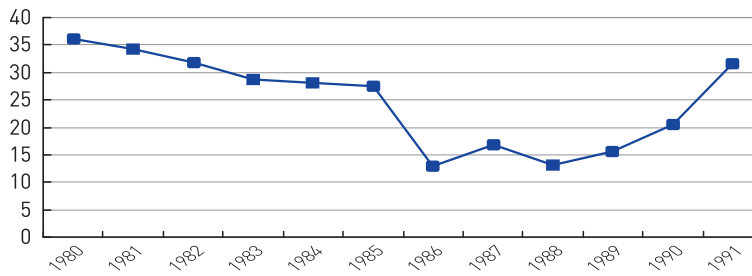
(Unit: Korean won per US dollar)



Source: The Bank of Korea.

Figure 2-6 | Changes in the International Crude Oil Prices (Dubai Crude)

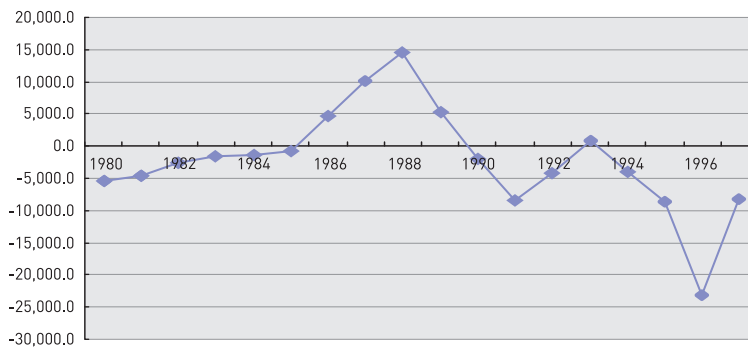
(Unit: USD/barrel)



Source: Petronet of the Korea National Oil Corporation.

Figure 2-7 | Current Account Balance

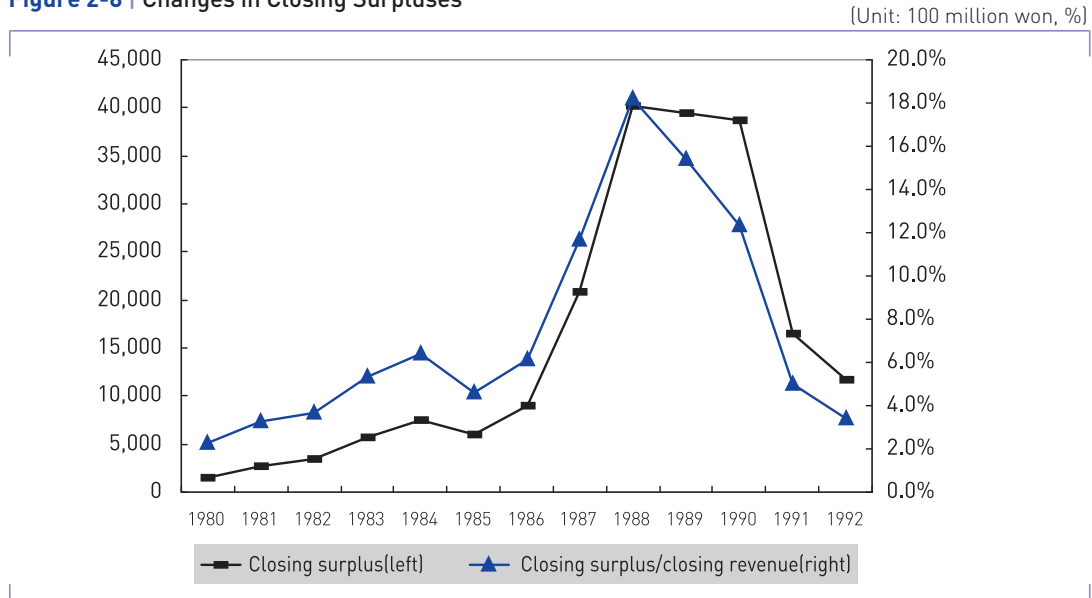
(Unit: million USD)



Source: The Bank of Korea.

In the 1980s, retrenchment policies in money supply and government expenditure and steady economic growth supported by the three lows phenomenon, among other factors, paved the way for fiscal surpluses. In particular, Fig. 2-8 shows the trend for closing surpluses of the general fund and changes therein during the period, which contained certain extraordinary surplus figures of up to more than 18% of the revenue in the general account in the late 1980's.⁴ This fiscal surplus conceivably provided fiscal authorities with some headroom to create new funds.

Figure 2-8 | Changes in Closing Surpluses



Source: Closing statements for each year

1.3. Transportation Demand and Investment at the Time of Introduction

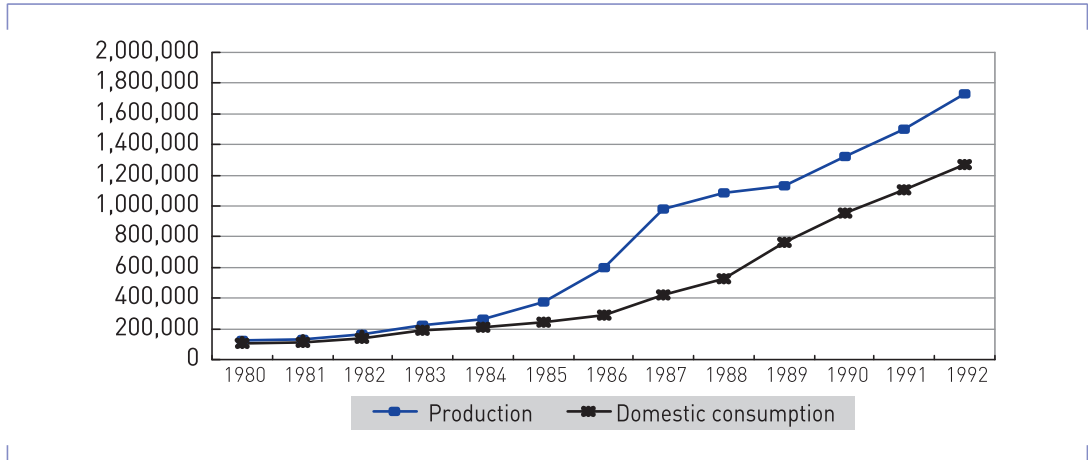
As discussed above, the Korean economy continued to grow steadily, growing more than double in size from 1983 to 1992. Such growth caused a number of changes in living patterns, one of which was an explosive increase in the demand for transportation. In particular, the rapid growth of the demand for automobiles heralded the age of car motorists.

Fig. 2-9 illustrates long-term trends related to automobiles in Korea. Domestic consumption, in particular, grew rapidly up until the early 1990's. Fig. 2-10 shows a similar phenomenon with car ownership.

4. The closing surplus of the general fund is the amount of all revenues less all expenditures. The closing surplus less the balance carried forward is the budget surplus.

Figure 2-9 | Changes in Automobile Production and Domestic Consumption

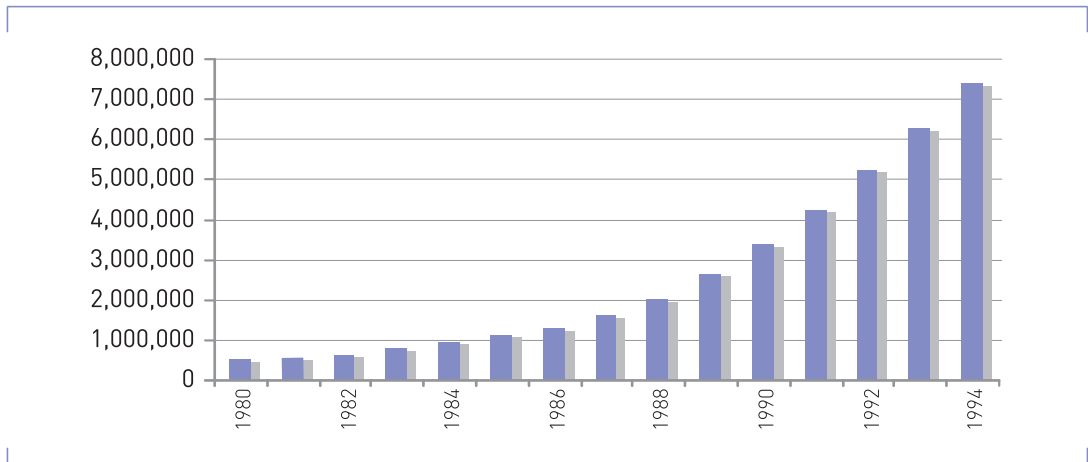
(Unit: vehicles)



Source: The Korea Automobile Manufacturer Association.

Figure 2-10 | Changes in Automobiles Owned

(Unit: vehicles)



Source: The Korea Automobile Manufacturer Association.

The sudden increase in the number of automobiles caused traffic congestion and, in turn, increased social costs. Table 2-2 shows traffic congestion costs for all roads within the country. The costs resulting from traffic congestion are paid by automobiles operating at sub-optimal speeds due to congested traffic on roads and calculated by adding up the additional cost of fuel and other costs related to operating the vehicle as well as the cost of time value. Although the figures for the 1980s are not available as these statistics were not collected until 1991, the congestion cost for 1991 was calculated to be 1.6 trillion Korean won, which increased rapidly to 4.2 trillion Korean won by 1994.

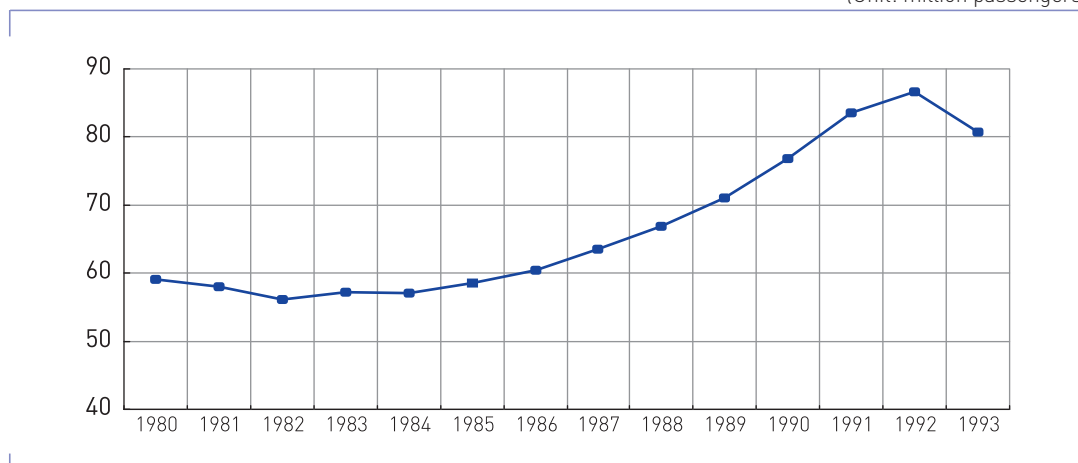
Table 2-2 | Congestion Costs for All Roads in the Country in the Early 1990s (Unit: 100 million won/year)

		1991	1992	1993	1994
By road type	Freeway	2,603	3,854	8,211	11,251
	National highway	12,305	18,973	23,562	26,822
	Regional highway	1,674	1,972	3,866	4,665
	Total	16,582	24,799	35,639	42,738
By vehicle type	Passenger car	3,535	5,893	10,707	15,381
	Bus	8,159	12,092	12,464	15,201
	Truck	4,888	6,814	9,668	12,156
	Total	16,582	24,799	32,839	42,738

Source: Dong-hyo Kim *et al.* (1999)

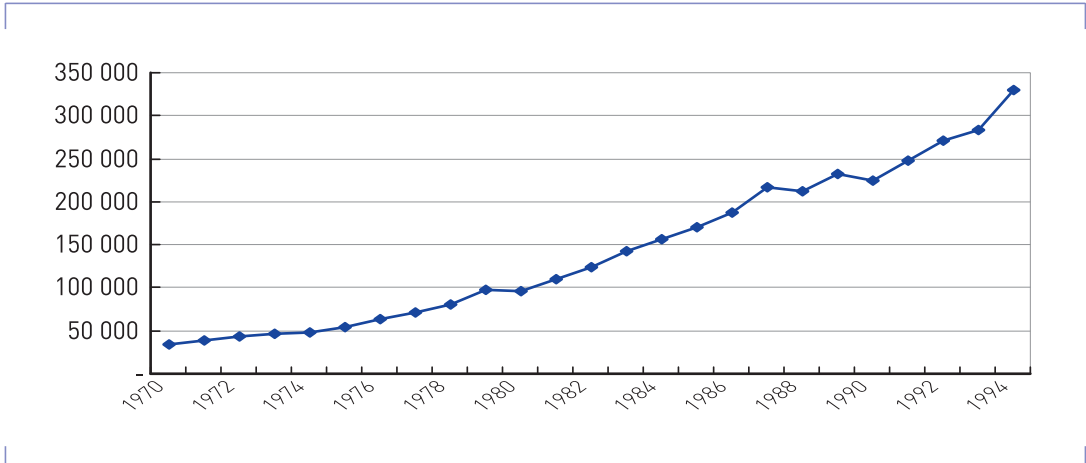
Korea's railway also became stressed due to a sudden increase in transportation demand. Fig. 2-11 illustrates changes in the annual number of passengers on the Gyeongbu Line, the main railway line in Korea. The 1992 figure is more than 1.5 times greater than that of the 1980 figure, indicating a rapid increase in passenger demand for railroad transportation during the period. Fig. 2-12 shows changes in inbound and outbound shipping traffic through Pusan Port, Korea's main port. The inbound and outbound shipping traffic continued to grow steadily, demonstrated by an average annual rate of growth of 8% during the 1980's. This indicates a high level of demand for port transportation. As in Fig. 2-13, the growing number of international passengers indicates a rapid increase in growth of the demand for airport during the late 1980's.

Figure 2-11 | Annual Passenger Traffic on the Gyeongbu Line (Unit: million passengers)



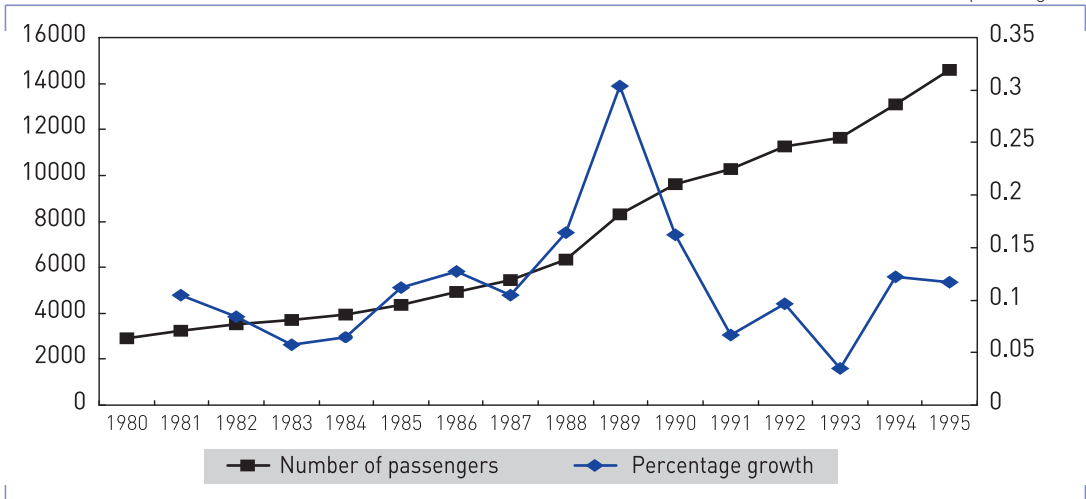
Source: MLTM Statistics Yearbook for each year.

Figure 2-12 | Changes in Freight Traffic for Inbound and Outbound Vessels through Busan Port (Unit: 100GT)



Source: 2009 Shipping Statistics Handbook.

Figure 2-13 | Changes in International Passenger Traffic (Unit: 1,000 passengers)



Source: 2009 Shipping Statistics Handbook.

Undoubtedly, these changes reflected a number of factors, and thus, should be carefully interpreted. But it was obvious that there was a great increase in the demand for transportation facilities up until the early 1990's. In contrast, government investment in infrastructure was insufficient to keep pace with these increases in transportation demand.

Table 2-3 shows the investment pattern in transportation facilities, in which investments as a percentage of GDP remained around 2% until the late 1960's. The beginning of the Third Five-

Year Economic Development Plan in the 1970's marked an increase in the percentage of investment in roads and ports, while investment in urban subway systems such as the construction of the Seoul subway system were stepped up during the Fourth and Fifth Five-Year Economic Development Plans. What matters is that this investment as percentage of GDP fell below 2% again during the Sixth Five-Year Economic Development Plan, well before the introduction of the transportation tax and the Special Fund for Transportation Facilities. The table indicates that its percentage in GDP started to rise again during the seventh development plan. During the period from 1983 to 1992, the expansion of railroads, roads, ports, airports and other elements of transportation infrastructure remained below 20%, leaving transportation facilities to become virtually saturated. This not only significantly hindered industrial development but also increased social and economic costs. As a result, bottlenecks in transportation became the most significant binding constraint to economic growth during and after the 1990's.

Table 2-3 | Investment Pattern in Transportation Facilities

(Unit: 100 million won (current price), %)

Period of the Economic Development Plan	GDP	Transportation Facility					Total
		Road	Railroad*	Subway	Airport	Port	
1st ('62-'66)	33,753	61 (0.18)	215 (0.64)	-	26 (0.07)	53 (0.16)	355 (1.05)
2nd ('67-'71)	106,901	1,147 (1.07)	634 (0.59)	83 (0.08)	76 (0.07)	267 (0.25)	2,207 (2.06)
3rd ('72-'76)	413,723	4,674 (1.13)	2,669 (0.65)	248 (0.06)	189 (0.05)	1,284 (0.31)	9,064 (2.19)
4th ('77-'81)	1,583,855	16,302 (1.03)	7,434 (0.47)	5,532 (0.35)	1,469 (0.09)	3,451 (0.22)	34,188 (2.16)
5th ('82-'86)	3,674,664	37,191 (1.01)	9,647 (0.26)	24,379 (0.66)	2,223 (0.06)	6,186 (0.17)	79,626 (2.17)
6th ('87-'91)	7,868,142	115,225 (1.46)	14,620 (0.19)	789 (0.01)	2,538 (0.03)	11,538 (0.15)	144,710 (1.84)
7th ('92-'96)	16,424,035	189,693 (1.15)	73,162 (0.45)	30,523 (0.19)	13,944 (0.08)	20,655 (0.13)	327,977 (2.00)
8th ('97-'00)	24,368,166	526,943 (2.16)	117,890 (0.48)	86,276 (0.35)	36,161 (0.15)	48,373 (0.20)	815,643 (3.35)

Note: The railroad figures include investment in high-speed rail and the regional transportation account (in and after '98). The figures in parentheses in the transportation facility and total columns are presented as percentages of GDP.

Source: The Ministry of Planning and Budget, Budgeting and Settlement Summary; Qtd. in the Ministry of Government Affairs and Home Affairs, Regional Fiscal Yearbook, Heon-gu Ha et al. (2001)

2. Details

2.1. The Special Fund for Road Projects and the Special Fund for Urban Rail Projects

Up until the late 1980's, as discussed in detail above, investment in transportation infrastructure did not keep pace with transportation demand, resulting in bottlenecks and increased distribution costs. Effectively, the government's fiscal response began with the establishment of the Special Fund For Road Projects and the Special Fund For Urban Rail Projects in 1989 and late 1990, respectively, paving the way for intensive investment centered around roads and urban rail.

The Special Fund for Road Projects was intended to raise funds required to build, repair and maintain roads in line with the increasing number of automobiles. The growth of automobiles, previously concentrated in Seoul and other larger cities, was spilling over into rural districts. Therefore, in order to ensure balanced regional development and enhancement of the standard of living, it was urgent to pave unpaved roads, widen roads with heavy traffic and otherwise upkeep poorly maintained roads. It was also necessary to widen routes with heavy traffic and improve highway interchanges within the city while enhancing road maintenance to ensure road safety and to extend the life of the road. Primary sources of revenue for the Special Fund for Road Projects covering these projects were the special excise tax on gasoline and diesel as well as automobiles.

As standards of living continued to increase and urban sprawl spread, traffic congestion in urban areas continued to deteriorate, making the expansion of a mass transit system of subways and railways a policy imperative. Therefore, the Special Fund for Urban Rail Projects was established to provide the necessary investment funds. The Special Fund for Urban Rail Projects was used to award and lend money required to build and operate a subway system in Seoul, Busan, Daegu and other the metropolitan areas. The Special Fund also financed the expenses needed for basic surveys related to a proposed urban railway projects and other expenses required to administer the special fund. As such, revenues amounting to 10% of the special excise tax on gasoline and diesel were transferred to the Special Fund for Urban Rail Projects. In addition, customs duties levied on non-railroad or non-track vehicles and their components and parts were also used as a revenue source.

Table 2-4 and Table 2-5 show budgeting changes in the Special Fund for Road Projects and the Special Fund for Urban Rail Projects. The Special Fund for Road Projects was maintained at

around 1 trillion Korean won before increasing significantly in 1992 and 1993. The Special Fund for Urban Rail Projects also significantly increased every year.

Table 2-4 | Budgeting Changes in the Special Fund for Road Projects

(Unit: million won)

Item		1989	1990	1991	1992	1993
Receipts	Current transfer receipts	682	1,824	3,000	1,689	1,200
	Goods and services sale receipts	65	92	749	800	400
	Loan receipts	19,785	42,068	47,473	89,006	3,332
	Transfer from the general fund	610,300	701,000	1,024,700	1,614,020	2,100,000
	Deposits received from the special fund for treasury investment and loan	461,400	347,427	0	0	0
	Total	1,092,232	1,092,411	1,075,924	1,705,515	2,104,932
Payments	Road construction	917,197	914,991	775,233	1,017,055	1,237,232
	Road operation	90,830	106,548	115,659	135,024	1,600,000
	Liabilities repaid	84,204	70,872	185,030	553,436	593,157
	Transfers to the special fund for treasury investment and loan	0	0	0	0	114,543
	Total	1,092,232	1,092,411	1,075,922	1,705,515	3,430,389

Source: Budget Summary References for each year.

Table 2-5 | Budgeting Changes in the Special Fund for Urban Rail Projects

(Unit: million won)

Item		1991	1992	1993
Receipts	Current transfer receipts	160,000	244,000	370,250
	Interest receipts	-	6,000	10,750
	Total	160,000	250,000	381,000
Payments	Seoul subway	60,000	100,000	150,000
	Busan subway	60,000	80,000	120,000
	Daegu subway	40,000	70,000	90,000
	Incheon subway	-	-	20,000
	Light rail survey costs	-	-	1,000
	Total	160,000	250,000	381,000

Source: Budget Summary References for each year.

2.2. Introduction of the Transportation Tax

Although the establishment of the Special Fund for Road Projects and the Special Fund for Urban Rail Projects helped invigorate investment in transportation, they were not without certain limitations. Above all, it was necessary to consolidate and manage under one account the

projects covered by the general fund and two special funds. Roads and urban rail (subway) have a direct impact on residents' lives, making it easier to gain support from members of the National Assembly and the local political community, whereas support for national railroads, ports, airports and other national projects is more difficult to obtain, making it more likely for them to be neglected. Policymakers therefore found it necessary to secure sources of revenue for these projects. This resulted in the establishment of the transportation tax and the Special Fund for Transportation Facilities.

The transportation tax is levied on gasoline and diesel fuels. But, the introduction of the transportation tax in 1994 did not mean the establishment of a new a source of tax revenue. As a matter of fact, even prior to the establishment of the transportation tax, excise taxes were levied on gasoline and diesel. Fuels have been known to carry a significant tax burden. As shown in Table 2-6, the differences in price before and after tax are very large.

Table 2-6 | The Current Structure of Transportation Fuel Pricing (Unit: Average supply prices offered by refiners)

Category	Premium gasoline	Regular gasoline	Kerosene	Heating oil	Diesel
Pre-tax price	751.83	698.99	724.72	716.4	739.16
Sales charges	36	0	0		
Other fees	0.47	0.47	0.47	0.47	0.47
Excise tax		0	90	90	
Transportation tax	529	529			367.5
Education tax	79.35	79.35	13.5	13.5	55.13
Motor fuel tax	137.54	137.54			95.55
Value added tax	153.42	144.54	82.87	82.04	125.78
Total for tax	899.31	890.43	186.37	185.54	643.96
After-tax price	1,687.61	1,589.89	911.56	902.41	1,383.59
Tax/after-tax price	0.53	0.56	0.20	0.20	0.46

Note: Reference period for average: July 18, 2010 - July 24, 2010.

Source: Oil Price Information Services (www.opinet.co.kr)

Table 2-7 summarizes the conversion of the special excise tax on gasoline and diesel into the transportation tax in 1994.⁵ The tax rates on gasoline and diesel were raised a lot. As the demand for gasoline and diesel was inelastic at the price levels back then, an increase in the tax rate translated into an increase in tax revenues.

5. The precise legal method is to exclude the imposition of excise taxes during the period for which the Transportation Tax Act remains applicable.

Table 2-7 | Establishment of the Transportation Tax in 1994

	1993	1994
Tax item	Special excise tax	Transportation tax
Imposed on	Gasoline and diesel	Gasoline and diesel
Tax rate	Gasoline: 100% (flexible tax rate of 109%) Diesel: 100% (flexible tax rate of 9%)	Gasoline: 150% Diesel: 20%
Use of revenue	Transferred to the Special Fund For Road Projects and the Special Fund For Urban Rail Projects	Transferred to the Special Fund for Roads and Transportation Facilities

There were changes in terms of how the revenues were used. Prior to the introduction of the transportation tax, the revenues were directed to the Special Fund for Road Projects and the Special Fund for Urban Rail Projects; however, after its introduction, the revenues were directed to the Special Fund for Transportation Facilities. Since all of the projects that came before the introduction of the Special Fund for Road Projects and the Special Fund for Urban Rail Projects were funded by the Special Fund for Road Projects, it is tempting to presume that no practical changes occurred at least in the way revenues from the transportation tax were used. A closer look at the fiscal structure of Korea does, however, indicate that the introduction of the transportation tax brought about significant changes in the distribution of public resources.

Table 2-8 | National Tax Items Prior to the Establishment of the Transportation Tax in 1994

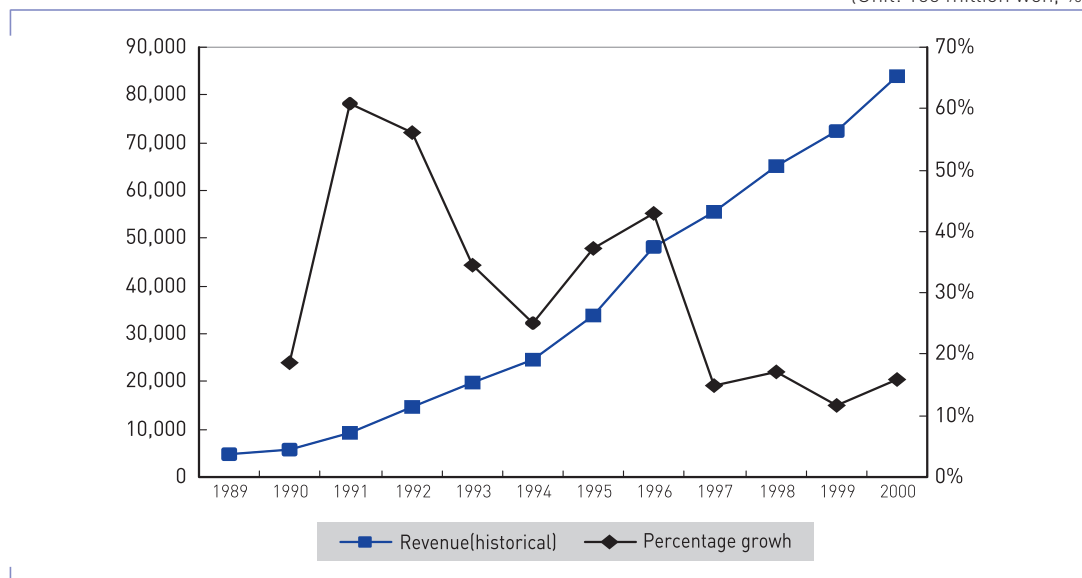
National taxes	Internal taxes	Personal income tax	25.07% of tax revenue is automatically directed by law to regional and regional education grants.
		Corporate income tax	
		Land windfall tax	
		Inheritance tax	
		Revaluation tax	
		Value added tax	
		Special excise tax	
		Liquor tax	
		Telephone tax	
		Securities transaction tax	
		Stamp tax	
		Transportation tax	
		Customs duties	
		Defense tax	
		Education tax	

Table 2-8 shows the structure of national taxes at the time. Prior to the establishment of the transportation tax, which is an earmarked tax, the special excise tax revenue was all accounted as internal tax revenue. Incidentally, pursuant to the Local Subsidy Act and the Local Education Grant Act, internal tax revenue of 25.07% was automatically apportioned as grants to local governments.⁶ This indicates that 25.07% of the taxes on diesel and gasoline, which were special excise taxes, were effectively used for local and education outlays. However, revenue from earmarked taxes is not accounted for as internal tax revenue. Accordingly, as the transportation tax was established and classified as an earmarked tax, a certain percentage of the taxes on gasoline and diesel ceased to be used for local and educational grants. In other words, despite identical taxable items and no changes in the nature of the use (special fund), the taxes were reclassified into an earmarked tax and excluded from internal taxes, resulting in a change in the distribution of revenue from local and educational grants to investment in transportation facilities.

Fig. 2-14 shows changes in the transportation tax revenue. As the tax was an ad valorem tax until 1995, the amount of revenue from the transportation tax was determined in a complicated manner involving three factors: changes in pre-tax prices, changes in usage and changes in tax rates. After it was change into a specific duty from mid-1995, changes in usage, changes in tax rates, etc. affected tax revenue.

Figure 2-14 | Changes in the Transportation Tax Revenue

(Unit: 100 million won, %)



Source: National Tax Statistics Yearbook.

6. A certain percentage of internal tax revenue in the general fund is still directed to local grants and educational grants.

Table 2-9 shows changes in the transportation tax, to which flexible tax rates are applicable. The flexible tax rate refers to a tax rate that may be adjusted by the government within a certain range as required by law. It is indicated that the transportation tax rate steadily rose, be it an ad valorem duty or a specific duty.

Table 2-9 | Changes in the Rates of the Transportation Tax (Fuel-Related Special Excise Tax)

Year	Gasoline	Diesel	Unit
Aug. 1980	160	10(7)	%
Nov. 1980	160(130)		
Mar. 1983	100	10(9)	
Jun. 1987	100(85)		
Mar. 1989	100(70)		
Jul. 1991	100		
Jan. 1992	100(109)		
Jan. 1994	150	20	
Feb. 1994	150(190)	20(25)	
Jul. 1994	150(170)	20	
Aug. 1995	150(195)	20(26)	Won/liter
Jan. 1996	345	40	
Dec. 1996	345(414)		
Jan. 1997		48	
Jan. 1998	455	85	
May. 1998	591	110	
Sep. 1998	691	160	
May. 1999	651		
Jan. 2000	630	155	
Mar. 2000	600	137	
May. 2000	630	155	
Jul. 2001	630	276	

Note: 1. The figures in parentheses are flexible rates.

2. The figures for gasoline from 1987 to 1992 are rates for unleaded gasoline.

3. The change from an ad valorem duty to a specific duty in 1996 resulted in a change in the unit.

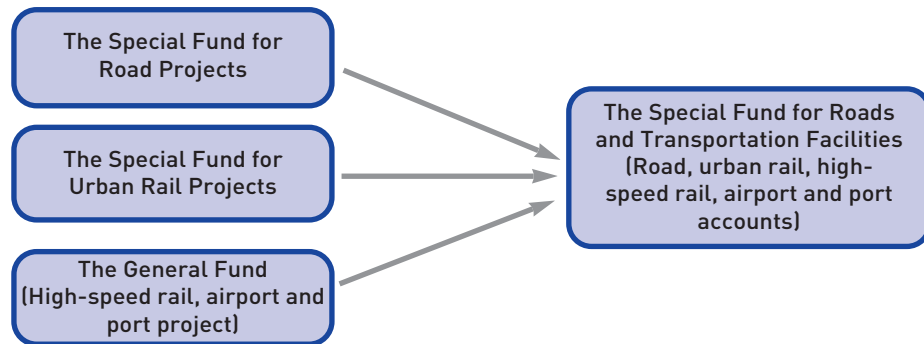
Source: The Korea Institute of Public Finance, Tax-Related Statistics Data Book, 2000.

Quote taken from internal data of the Ministry of Construction and Transportation, Heon-gu Ha et al. (2001)

2.3 Operation of the Special Fund for Transportation Facilities

2.3.1 History of the Special Fund for Transportation Facilities

As discussed above, the introduction of the transportation tax accompanied the establishment of the Special Fund for Roads and other Transportation Facilities and the consolidation of the Special Fund for Road Projects, the Special Fund for Urban Rail Projects and high-speed rail, airports and some other projects covered by the general fund.



In the initial phase of the establishment, four accounts - road, urban rail, high-speed rail, and airport and port accounts - were maintained, in which the road account was managed by the Ministry of Construction, the urban rail, high-speed rail and airport accounts by the Ministry of Construction, and the port account by the Korea Maritime and Port Administration. The Special Fund for Railroad Projects was excluded from consolidation, in consideration of the fact that it had strong entrepreneurial aspects; in that, the costs of constructing and operating it were paid for with income from railway fares and other operating income. Also, the Korean National Railroad, a government agency, was expected to be transformed into a publicly owned enterprise by 1996.

In late 1995, the relevant law was renamed from the Act on the Special Fund for Roads and Transportation Facilities to the Act on the Special Fund for Transportation Facilities. In addition, a railroad account was added to administer general railroad projects in addition to urban rail projects and high-speed rail projects, resulting in the fund consisting of four accounts: road, railroad, airport and port. Furthermore, the establishment of the Ministry of Maritime Affairs & Fisheries in 1996 led the Ministry of Construction and Transportation to take charge of road, railroad and airport accounts and the Ministry of Maritime Affairs & Fisheries to manage the port account.⁷

7. In December 1994, the Ministry of Construction and the Ministry of Transportation was consolidated into the Ministry of Construction and Transportation, while in 1996, maritime-related functions previously performed by thirteen departments and administrations were unified to create the Ministry of Maritime Affairs & Fisheries.

In April 1997, the enactment of the Special Act on the Regional Transport Management of Metropolitan Areas resulted in the regional transportation facilities account being added to cover project costs incurred in connection with the construction and improvement of regional roads, regional electric railroads and other regional transportation facilities in a stable manner. Accordingly, regional road projects were separated from other road projects, and certain revenue sources were allocated from the road account to the regional transportation facilities account in consideration of the effects from road projects being replaced by regional railroad construction.

In 2004, investment in urban railroad and port sectors was increased to offset the revenue loss resulting from the separation of the urban rail account from the railroad account and a reduction in transportation tax revenue allocated to the road sector. In July 2005, the urban rail account was transformed into the public transport account, laying the foundation for stable fiscal support for public buses and other modes of public transport in addition to urban railways.

2.3.2 Revenue Sources and Projects for the Special Fund for Transportation Facilities

The revenue sources for the Special Fund for Roads and Transportation Facilities were the transportation tax, special excise tax on passenger cars, automobile-related customs duties, borrowings and usage fees levied in airports, ports and elsewhere. The revenue from ports, airports and other usage fees, in particular, were redirected from the general fund to the special fund, in adherence with the ‘beneficiary pays’ principle.

Table 2-10 shows changes in the overall size of the transportation tax and the Special Fund for Transportation Facilities. As shown, the size of the Special Fund for Transportation Facilities more or less tripled during the period from 1994 to 2008. The rate of increase in the transportation tax revenue was higher: the transportation tax revenue in 2008 reached 11.9 trillion Korean won, which more than quadrupled from 2004.

Table 2-10 | Size of the Transportation Tax Revenue and the Special Fund for Transportation Facilities

(Unit: 100 million won)

	(1)	(2)	Road account	Railroad account	Airport account	Regional transportation account	Port transportation account	Urban rail account
1994	2.5	4.5	2.8	0.7	0.6	0.0	0.4	0
1995	3.4	5.4	3.3	1.2	0.4	0.0	0.5	0
1996	4.8	6.5	4.2	1.3	0.4	0.0	0.6	0
1997	5.5	8.3	5.2	1.6	0.6	0.0	0.9	0
1998	6.5	10.3	5.9	2.3	1.0	0.1	1.0	0
1999	7.3	11.7	7.1	2.4	1.0	0.2	1.0	0
2000	8.4	12.3	7.5	2.9	0.7	0.2	1.0	0
2001	10.3	12.8	8.3	2.9	0.3	0.2	1.1	0
2002	9.5	13.2	8.1	3.3	0.3	0.2	1.3	0
2003	10.0	14.4	8.4	3.6	0.4	0.3	1.7	0
2004	10.1	13.6	7.9	3.2	0.4	0.4	1.7	0
2005	10.3	13.1	6.9	2.2	0.4	0.5	1.8	1.3
2006	9.6	12.6	6.5	2.0	0.4	0.6	1.8	1.4
2007	11.5	12.9	6.7	2.0	0.3	0.7	1.8	1.3
2008	11.9	13.2	7.0	2.3	0.2	0.7	1.7	1.4
2009	10.1	16.9	8.9	3.3	0.1	1.1	1.8	1.7

Note: (1) The transportation tax revenue, (2) The Special Fund For Transportation Facilities.

Source: Annual Taxation Summary and Budgeting Summary.

Table 2-11 shows the makeup of the Special Fund for Transportation Facilities by revenue source. Tax revenues accounted for more than 80%, where the transportation tax revenue remained most critical. The amount transferred from the general fund to the special fund accounted for around 10% of all revenue, though with some annual variance. The transfer from the general fund was due to the reclassification of high-speed rail, airport and port projects, which had been covered by the general fund, into projects covered by the Special Fund For Transportation Facilities. This continues to this day.

Tables 2-12 and Table 2-13 classify revenue sources and projects for each of the accounts in the Special Fund for Transportation Facilities in detail. The transportation tax remained a primary source of revenue for all accounts. The size of the budgets across all accounts posted steady growth, by two to three times in 2000 from 1994.

Another primary revenue source for the road account, in addition to the transportation tax, was the special excise tax imposed on automobiles. Expenditures were used to construct and maintain freeways, national highways and other roads. The revenue sources for the railroad account also included customs duties on imported cars in addition to the transportation tax, where the transfer from the general fund also accounted for a significant percentage. Its expenditures consisted of; inter alia, the costs of constructing, improving, maintaining and modernizing conventional and high-speed railroads. As for the airport and port accounts, usage fee revenues other than transportation tax revenues were based on the ‘beneficiary pays’ principle, and expenditures were used to add and expand airport and port facilities and to improve, expand and maintain safety facilities. The revenues to the regional transportation account consisted of transportation tax revenues and transfers from the general fund, which were used to construct, repair, maintain and operate regional transportation facilities such as regional roads and railroads.

Table 2-11 | Changes in Revenue Sources after the Introduction of the Special Fund for Transportation Facilities

(Unit: 100 million won, %)

Revenue sourcing		1994	1995	1996	1997	1998	1999	2000
Tax	Transportation tax	32,244 (71.1)	35,558 (66.0)	42,338 (64.8)	59,653 (72.0)	72,236 (69.9)	81,661 (69.6)	98,279 (79.7)
	Special excise tax on passenger cars	5,769 (12.7)	7,194 (13.4)	8,550 (13.1)	9,584 (11.6)	8,328 (8.1)	6,961 (5.9)	8,795 (7.1)
	Customs duties on imported cars	784 (1.7)	1,035 (1.9)	1,696 (2.6)	1,785 (2.2)	2,033 (2.0)	1,196 (1.0)	1,369 (1.1)
	Subtotal	38,797 (85.5)	43,787 (81.3)	52,584 (80.5)	71,022 (85.8)	82,597 (80)	89,818 (76.5)	108,443 (87.9)
Non-tax revenues	Airport usage fees	524 (1.2)	935 (1.7)	1,252 (1.9)	1,553 (1.9)	1,916 (1.9)	1,254 (1.1)	633 (0.5)
	Security facility usage fees	133 (0.3)	324 (0.6)	263 (0.4)	385 (0.2)	225 (-0.2)	110 (0.1)	47 (0.0)
	Port usage fees	2,052 (4.5)	1,879 (3.5)	1,745 (2.7)	1,971 (2.4)	2,270 (2.2)	2,270 (1.9)	2,452 (2.0)
	Subtotal	2,709 (6.0)	3,138 (5.8)	3,260 (5.0)	3,909 (4.5)	4,411 (4.3)	3,634 (3.1)	3,132 (2.5)

Revenue sourcing		1994	1995	1996	1997	1998	1999	2000
Miscellaneous	Transfer from the general fund	2,359 (5.2)	4,341 (8.1)	8,264 (12.7)	6,447 (7.8)	14,851 (14.4)	20,308 (17.3)	9,200 (7.5)
	Deposits from the special fund for treasury investment and loan	1,250 (2.8)	1,850 (3.4)					
	Property revenue	230 (0.5)	413 (0.8)	472 (0.7)	530 (0.6)	439 (0.4)	454 (0.4)	1,005 (0.8)
	Interest receipts etc.	3,839 (8.5)	311 (0.6)	730 (0.1)	912 (1.1)	1,041 (1.0)	3,174 (2.7)	1,529 (1.2)
	Subtotal	3,839 (8.5)	6,915 (12.9)	9,466 (13.5)	7,889 (-9.5)	16,331 (-15.8)	23,936 (-20.4)	11,734 (-9.5)
Total		45,345 (100.0)	53,840 (100.0)	65,310 (100.0)	82,820 (100.0)	103,339 (100.0)	117,388 (100.0)	123,309 (-100.0)

Table 2-12 | Budget Revenues to the Special Fund for Transportation Facilities by Account

(Unit: 100 million won)

Category		1994	1995	1996	1997	1998	1999	2000
Road account	Subtotal	28,396	33,486	41,670	51,626	58,939	71,468	75,330
	Transportation tax	22,610	26,272	31,034	40,266	47,314	53,478	64,372
	Special excise tax on passenger cars	5,769	7,194	8,550	9,584	8,328	6,961	8,795
	Interest receipts etc.	17	20	377	483	555	2,287	840
	Transfers from the general fund			1,709	1,293	2,742	8,742	1,323
Railroad account	Subtotal	9,744	11,809	12,907	15,762	23,298	23,551	28,590
	Transportation tax	7,597	8,833	8,941	10,857	13,147	14,862	19,852
	Customs duties on imported cars	784	1,035	1,696	1,785	2,033	1,196	1,369
	Deposits from the special fund for treasury investment and loan ¹¹	1,150	1,650					
	Interest receipts	213	291	353	429	486	887	682
	Transfers from the general fund			1,917	2,691	7,632	6,606	6,687

Category		1994	1995	1996	1997	1998	1999	2000
Airport account	Subtotal	3,200	3,645	4,480	6,125	9,937	10,319	7,423
	Transportation tax	2,037	453	2,363	2,565	3,551	4,873	5,897
	Airport usage fees	524	935	1,252	1,553	1,916	1,254	633
	Security facility usage fees	133	324	263	385	225	110	47
	Transfers from the general fund	506	1,933	602	1,622	4,245	4,082	846
	Surpluses							
Port account	Subtotal	4,005	4,900	6,253	9,307	10,165	10,243	9,739
	Transportation tax				5,965	7,224	6,741	6,192
	Port usage fees	2,052	1,879	1,745	1,971	2,270	2,270	2,452
	Deposits from the special fund for treasury investment and loan	100	200					
	Interest receipts etc.		413	472	530	439	454	1,005
	Transfers from the general fund	1,853	2,408	4,036	841	232	778	90
Regional transportation account	Subtotal					1,000	1,807	2,227
	Transportation tax					1,000	1,707	1,966
	Transfers from the general fund						100	254
	Balance brought over							7
Grand total	45,345	53,840	65,310	82,820	103,339	117,388	123,309	

Source: Quote taken from the Ministry of Construction and Transportation, Heon-gu Ha et al. (2001)

Note: 1) The loans from the special fund for treasury investments and loans.

Table 2-13 | Expenditures from the Special Fund for Transportation Facilities by Account

(Unit: 100 million won)

Category		1994	1995	1996	1997	1998	1999	2000
Road account	Subtotal	28,396	33,486	41,670	51,626	58,939	71,468	75,330
	Freeway construction	9,119	9,834	10,136	12,205	17,979	21,818	21,620
	National highway construction	15,739	18,844	25,679	33,005	34,216	42,840	46,655
	Road operation	2,516	3,655	5,007	5,611	5,509	6,036	5,990
	Liabilities repaid	1,022	1,153	848	805	1,235	774	521
	Transfers to the special fund for treasury investment and loan							

Category		1994	1995	1996	1997	1998	1999	2000
Railroad account	Subtotal	9,744	11,809	12,907	15,762	23,298	23,551	28,590
	High-speed rail	3,244	3,276	3,747	5,396	5,236	5,620	8,318
	Urban rail	6,430	8,371	8,539	8,277	9,386	10,274	11,670
	Transfers to the Special Fund For Road Projects	70	162	621	2,089	8,481	7,457	8,306
	Loans repaid					140	140	216
	Research and development					55	60	80
Airport account	Subtotal	3,200	3,645	4,480	6,125	9,937	10,319	7,423
	Incheon International Airport	2,190	2,080	2,482	3,645	7,291	7,955	3,871
	Regional airports	1,010	1,548	1,970	2,453	2,622	2,347	3,539
	Airport fees		17	28	27	24	17	13
Port account	Subtotal	4,005	4,900	6,253	9,307	10,165	10,243	9,739
	Port development					8,286	8,976	8,807
	Liabilities repaid					357	123	97
	General loans					557	400	400
	Subsidies					965	744	435
Regional transportation account	Subtotal					1,000	1,807	2,227
	Regional roads					500	900	1,000
	Regional railroads					500	700	1,050
	Public transportation						200	171
	Research and development						7	6
Grand total		45,345	53,840	65,310	82,820	103,339	117,388	123,309

Source: Quote taken from the Ministry of Construction and Transportation, Heon-gu Ha et al. (2001).

As explained above, the primary revenue source for the Special Fund For Transportation Facilities is the transportation tax. Interestingly, transportation tax revenues were being used in sectors other than those covered under the Special Fund For Transportation Facilities. There were also differences, from period to period, in the allocation among the various accounts in the Special Fund for Transportation Facilities.

Firstly, transportation tax revenues had all been transferred to the Special Fund For Transportation Facilities since the introduction up until 2001. Then from 2001, 14.2% of transportation tax revenues were used as local transfers.⁸ In 2007, the transportation tax was renamed the transportation, energy and environmental tax, resulting in its revenues being allocated to the funds covering, inter alia, transportation, environment, energy and balanced

8. The details of the local transfer project will be discussed in Chapter II, Section 3.

national development at prescribed rates. It appears that this change was made considering the impact from the consumption of gasoline, diesel and other energy sources on the environment as well as the relevance to energy consumption savings and investment.

Table 2-14 | Allocation of Transportation Tax Revenues

1994 - 2000		2001 - 2006		2007 - present	
The Special Fund For Transportation Facilities	100%	The Special Fund For Transportation Facilities	85.8%	The Special Fund For Transportation Facilities	80.0%
		The Special Fund for the Management of Local Transfers	14.2%	The Special Fund for Environmental Improvement	15.0%
				The Special Fund for Energy and Resources Projects	3.0%
				The Special Fund for Balanced National Development	2.0%

Transportation tax revenues, once transferred to the Special Fund For Transportation Facilities, were in turn allocated to each account. Table 2-15 shows the initial allocation rates, which appear to have been determined, to a certain extent, at percentage rates which transportation tax revenues had been used prior to the establishment of the Special Fund For Transportation Facilities.

Table 2-15 | Allocation of Transportation Tax Revenues among Accounts

Prior to the establishment of the transportation tax	Following the establishment of the transportation tax
The Special Fund for Road Facilities: 90% of the special excise tax on gasoline All of the special excise tax on diesel	Road account: 67.5% of transportation tax revenues Urban rail account: 13.5% of transportation tax revenues
The Special Fund For Urban Rail Projects: 10% of the special excise tax on gasoline	High-speed rail and airport account: 9% of transportation tax revenues Retained: 10% of transportation tax revenues

As summarized in Table 2-16, the rates of allocation among accounts have been adjusted in accordance with the establishment and discontinuation of funds, changes in priorities, etc. Firstly, the incorporation of the high-speed rail account into the railroad account in 1996

resulted in an increase in funds allocated to the railroad account from 13.5% to 18.2%, and in turn, a decrease in the airport account from 9.0% to 4.3%. Furthermore, the introduction of the regional transportation account in 1997 resulted in the rate of allocation to the regional transportation account being set at 2.0%, instead of a reduction of 2.0% point (67.5% to 65.5%) to the road account since the regional railroad construction was replacing the road projects.

In addition, the establishment of the urban rail account led to the adjustment of allocation rates from 2005. In June 2004, an allocation scheme with ranges was introduced to ensure a flexible response to the demand for investment in each transportation sector. In 2007, the urban rail account was renamed the public transportation account, and in 2009, there were some micro-changes. Lastly, from 2011 onward, the rates of all revenues among accounts rather than the rates of transfers from transportation tax revenues are expected to be predetermined. Since each account has other receipts than transfers from transportation tax revenues, there is a difference between the two criteria mentioned above.

Table 2-16 | Changes in the Rate of Allocation of Transportation Tax Revenues by Account Transferred to the Special Fund for Transportation Facilities¹⁾

1994~1995		1996~1997		1998~2000		2001~2004			
Account	Allocation	Account	Allocation	Account	Allocation	Account	Allocation		
Road	0.675	Road	50.675	Road	50.655	Road	0.655		
Urban rail	0.135	Railroad	0.182	Railroad	0.182	Railroad	0.182		
High- speed rail and airport	0.090	Airport	0.143	Airport	0.043	Airport	0.043		
Misc.	0.100	Misc.	0.100	Regional transportation facilities	0.020	Regional transportation facilities	0.020		
				Discretionary	0.100	Discretionary	0.100		
				2005~2006		2007~2008		2009~2010	
				Account	Allocation	Account	Allocation	Account	Allocation
				Road	0.510~0.590	Road	0.510~0.590	Road	0.510~0.590
				Railroad	0.140~0.200	Railroad	0.140~0.200	Railroad	0.140~0.200
				Urban rail	0.060~0.100	Public transportation	0.060~0.100	Public transportation	0.060~0.100
				Airport	0.020~0.060	Airport	0.020~0.060	Airport	0.060 or below
				Port	0.100~0.140	Port	0.100~0.140	Port	0.100~0.140
				Regional transportation facilities	0.020~0.060	Regional transportation facilities	0.020~0.060	Regional transportation facilities	0.020~0.060

Note: 1) Since 2001, part of the transportation tax revenue was transferred to areas other than the Special Fund For Transportation Facilities. The rates shown in the table means the percentage rates in the revenues transferred to the special fund.

Source: The Enforcement Decree and the Enforcement Regulations of the Act on Special Fund For Transportation Facilities.

2.4. Local Transportation Facilities and Subsidies from the Central Government⁹

2.4.1. Division of Roles between the Central and Local Governments

Roads and other infrastructural facilities are mostly used by local residents, and thus, by nature can be considered local public goods. Theoretically, it is therefore desirable for each local government to secure the revenues and make the investments as customized to the characteristics and size of the applicable area. However, as freeways, regional railroads, airports, etc. naturally have positive externalities, blind reliance on decisions made by each local government would likely lead to undersupply. It is therefore necessary for the central government to support, to a certain extent, the investment made by the local government in transportation facilities.

Particularly in Korea, the large relative difference in fiscal capacity between the Seoul Metropolitan Area and other areas requires a program for making appropriate adjustments in this respect. In other words, the fiscal disparity resulting from differences in economic capacity requires a local finance equalization scheme whereby the central government allocates certain portions of national tax and other revenues to local governments. The local finance equalization schemes in Korea currently include, *inter alia*, Revenue Support Grants, Treasury Subsidies and the Special Fund for Balanced National Development, which also include the discontinued local transfer scheme. Local finance equalization schemes, particularly local transfer scheme, are closely related to transportation facility investments made by local governments and the Special Fund For Transportation Facilities.

Treasury Subsidies are intended to be used for a group of specific projects determined by the central government pursuant to the Act on the Budgeting and Management of Subsidies. A Treasury Subsidy is financial assistance given to local governments in an amount equal to all or part of the project cost, being much of the nature of the dependent revenue source supervised by the central government. As indicated in Table 2-17, Treasury Subsidies related to transportation projects are of proportional form, where the rates of the subsidies and the local government's own funds are prescribed. The sources of subsidies granted by the central government are mostly the Special Fund For Transportation Facilities.

Revenue Support Grants consist of: general grants, special grants and decentralization grants. General grants are unconditionally allocated to local governments, accounting for most of the grants allocated. Special grants are paid when a local government has unforeseen

9. Jae-hak Oh and Sang-woo Park (2007) and the Ministry of Planning and Budget (2000) were much referred to.

financial demand due to a natural disaster or any changes in local fiscal conditions that could not have been accounted for at the time general grants were budgeted. Introduced in 2005, decentralization grants have been temporarily maintained after part of the projects covered under treasury grants were turned over to local governments. Transportation-related projects previously covered by decentralization grants included, inter alia, projects intended to build efficient public transportation systems and to ensure that public transportation systems were accessible by the disabled and the elderly.

The Special Fund for Balanced National Development was established pursuant to the Special Act on Balanced National Development in 2005. It was intended to provide fiscal support for the implementation of balanced national development measures and of projects for local development and innovation in an efficient manner.^{10,11} In the Special Fund for Balanced National Development, revenue sources are allocated, using prescribed formulas, to local development projects, local innovation projects, etc. in which certain transportation-related projects are included.

Table 2-17 | Examples of Reference Treasury Subsidy Rates Related to Transportation Projects (as of 2007)

Project name	Reference subsidy rate (in %)		Project owner	Account ¹¹
	Treasury	Local matching fund		
Joint building of roads and underground facilities	50	50	Local government	Road
Subsidies for low-floor buses	50	50	Local government	The general fund
Building of intelligent transportation systems	50	50	Local government	Road
Construction of urban rail	60	40	Local government	Urban rail
Replacement of interior materials of urban rail rolling stock	50	50	Organization operating the subway system	Urban rail

10. Although the Special Fund for Balanced National Development was renamed the Special Fund for Regional and Local Development, it will be referred to as the Special Fund for Balanced National Development in this article for the sake of consistency.

11. The projects covered by the Special Fund for Balanced National Development involve a mix of blocked grants and treasury grants. In the case of a blocked grant, the central government determines the scope and objectives of a project, which the local government may freely organize the project within certain parameters.

Project name	Reference subsidy rate (in %)		Project owner	Account ¹¹
	Treasury	Local matching fund		
The Busan-Gimhae Light Rail Transit Construction Project	20	20	The Ministry of Construction and Transportation, the Busan City Government and the Gimhae City Government	Urban rail
	(Treasury loan 60)			
Construction of bypass routes for national highways	Fixed amounts		The central and municipal governments	Road
Support for regional roads	50	50	Local government	Regional transportation
Regional railroads	75	25	Local government	Regional transportation

Source: Jae-hak Oh and Sang-woo Park (2007)

Note: Refers to the account in the Special Fund For Transportation Facilities, with the exception of the general fund.

2.4.2. The Local Transfer Scheme and Regional Highway Improvement

Established in 1991 and discontinued in 2005, the Local Transfer Scheme was one of the local finance equalization schemes used and deserves a more detailed examination in this Section as it is deemed to have made significant contributions to the expansion of local roads.

The system of local government in Korea was initiated in 1952 and discontinued in 1961 before being restored in the early 1990's. Incidentally, the full fledged implementation of the local government system required a means to provide revenue sources for local governments. To this end, policymakers proposed, inter alia, a method of transferring certain national tax revenues to local governments and a tax sharing scheme where certain tax items would be shared between the central government and local governments. With significant differences in economic capacity between the Seoul Metropolitan Area and other areas, Korea required a method for not only transferring revenue sources to local governments but also reducing the gap in fiscal capacity among local governments. This background gave birth to the Local Transfer Scheme.¹²

12. In other words, it was argued that it would be more desirable to effectively transfer revenue sources to local governments in form of local transfers with certain aspects of local finance equalization added than have national taxes transferred as local taxes.

Since the revenue support grant scheme for general revenue sources already existed, local transfers were intended to ensure equal development among regions. In other words, the scheme was a sort of tax sharing scheme whereby the central government collected taxes on its own behalf, and then, allocated revenues to particular projects for equal development in accordance with the fiscal demand of each area. It was named the local transfer scheme. Local transfers were administered and maintained by the Ministry of Government Affairs and Home Affairs under the Special Fund for the Management of Local Transfers, which were then directed to the general fund of the local government after being transferred to the local government,.

Table 2-18 shows changes in the revenue sources for local transfers. At the time of its establishment in 1991, the revenue sources for local transfers were comprised of 50% of the land windfall tax, 15% of the liquor tax and all of the telephone tax. Afterwards, three law revisions led to the percentage of transfers to be increased.¹³ In 1995, an amount equal to 19/150 of revenues from the rural development tax was added, while in December 1998, revenues from the land windfall tax were excluded from local transfers. It is particularly noteworthy that the consolidation of the telephone tax as part of the value added tax in September 2001 resulted in revenues from telephone tax being excluded from local transfers. Instead, it was replaced by 14.2% of transportation tax revenues.

Table 2-19 shows the percentage of projects covered by local transfers in terms of expenditure. At the time of its introduction, the local transfer scheme was limited to local road projects. Thereafter, the scheme was expanded to include rural development projects, water pollution prevention projects, youth training projects, local development projects, etc. In the case of road projects, local transfers for local roads were allocated to each class of roads and then to each road project of each local government.

The local transfer scheme is deemed to have made significant contributions to local road facilities. The reform in 2005, however, was implemented to enhance the autonomy of local governments in fiscal administration and enhance the effects, terminating the local transfer scheme. The projects covered by local transfers back then were divided into: decentralization grant projects (2.7 trillion Korean won), the special fund for balanced national development projects (0.4 trillion Korean Won) and treasury grant projects (1.3 trillion Korean Won), depending on the nature of each project.

13. This figure was 60% in 1992, 80% in 1994 and 100% in 1997

Table 2-18 | Revenue Sources for Local Transfers

Year	Revenue source	Year	Revenue source
1991	- 50% of the land windfall tax - 15% of the liquor tax - 100% of the telephone tax	1995 - 1997	- 50% of the land windfall tax - 80% of the liquor tax - 100% of the telephone tax - Transfers from the special fund for rural development
1992	- 50% of the land windfall tax - 60% of the liquor tax - 100% of the telephone tax	1998 - 1999	- 100% of the liquor tax - 100% of the telephone tax - Transfers from the special fund for rural development
1993	- 50% of the land windfall tax - 60% of the liquor tax - 100% of the telephone tax - Other local transfers	2000	- 95% of the liquor tax - 100% of the telephone tax - Transfers from the special fund for rural development
1994	- 50% of the land windfall tax - 80% of the liquor tax - 100% of the telephone tax - Other local transfers	2001 - 2004	- 100% of the liquor tax - 14.2% of the transportation tax - Transfers from the special fund for rural development

Source: The Ministry of Strategy and Finance

Table 2-19 | Expenditures from Local Transfers by Project (as budgeted)

	1991	1995	2000	2004
Road improvement projects	100%	57.9%	48.5%	43.5%
Rural development projects		8.4%	6.8%	8.1%
Water pollution prevention projects		16.7%	0.4%	30.5%
Youth training projects		0.7%	40.1%	0.7%
Local development projects		16.3%	28.1%	17.2%

Source: The Ministry of Strategy and Finance

2.5. Other Earmarked Taxes¹⁴

2.5.1. The Education Tax

Enacted in December 1981 and effected in 1982, the education tax was intended to secure a

14. Excerpted from Gi-baek Park (2007)

revenue source to ensure the improvement of quality in education. As the education tax does not have an exclusive source but is surtax, a tax levied upon a number of other taxes, it has been criticized for complicating the taxation structure. Although the education tax was levied exclusively as a national tax in the beginning, a distinction between the education tax that is a national tax and the local education tax that is a local tax has grown since 2001, depending on the tax base. Currently, the tax base for the education tax includes income earned by financial and insurance service providers, special excise tax amounts, transportation tax amounts, liquor tax amounts, etc., while those for the local education tax includes registration tax amounts, leisure tax amounts, property tax amounts, etc.

Table 2-20 | Tax Bases and Rates for the Education Tax (as of 2010)

Tax base	Tax rate
* The earnings earned by financial and insurance service providers	0.5%
* Special excise tax amounts	30% (or 15% in the case of kerosene, fuel oil or butane for transportation use)
* Transportation tax amounts (gasoline and diesel)	15%
* Liquor tax amounts	10% (or 30% in the case of any liquor on which the liquor tax is levied at the rate of 70% or above)

Source: Taxation Overview (2010)

Table 2-21 | Tax Bases and Rates for the Local Education Tax (as of 2010)

Tax base	Reference rate
* Registration tax amounts	20%
* Leisure tax	40%
* The <i>per-capita</i> portion of the resident tax	10% (or 25% in the case of a municipality where the number of residents is 500,000 or more)
* Property tax amounts	20%
* Automobile tax amounts	30%
* Tobacco excise tax amounts	50%

Source: Taxation Overview (2010)

A look at the changes in the amount of education tax indicates that although the total amount was around 200 billion Korean won or 0.36% of GDP in 1982, the inclusion of the special excise tax and other local taxes into the tax base raised the figure to around 0.7% of the GDP in 1991. The figure rose to around 1% of the GDP in 1996 and then dropped to around 0.5% of the GDP in 2001, after a portion of the education tax was changed into a local education tax. The

percentage of the education tax, including the local education tax, in the GDP rose due to the introduction of the local education tax but trended downward thereafter.

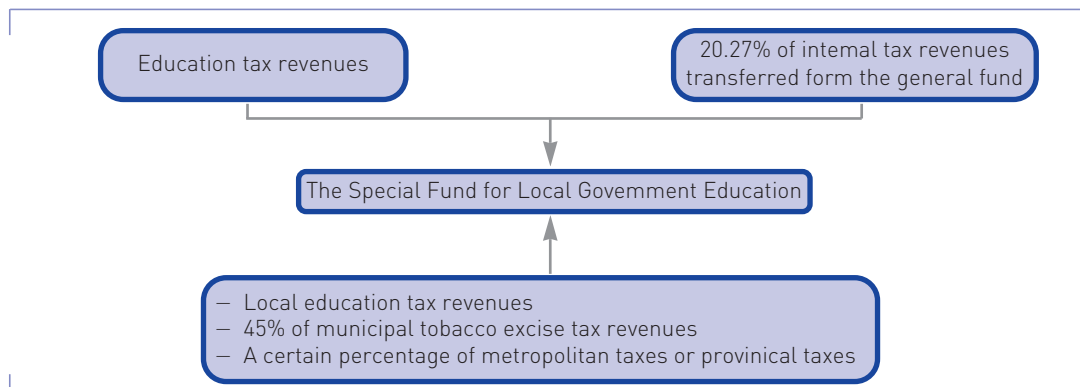
Table 2-22 | Changes in the Education Tax (including the local education tax)

(billion won, %)

Year	'82	'83	'84	'85	'86	'87	'88	'89	'90	'91
Education tax amount	198	263	285	321	372	411	512	423	521	1,532
% in GDP	0.36	0.40	0.38	0.38	0.38	0.36	0.37	0.27	0.28	0.68
Year	'92	'93	'94	'95	'96	'97	'98	'99	'00	'01
Education tax amount	1,822	2,079	2,540	2,993	4,124	5,399	5,203	5,297	5,798	7,261
% in GDP	0.71	0.72	0.75	0.75	0.92	1.10	1.07	1.00	1.00	1.17
Year	'02	'03	'04	'05	'06	'07	'08	'09		
Education tax amount	7,489	7,660	7,614	7,818	7,763	8,375	9,044	8,549		
% in GDP	1.09	1.06	0.98	0.91	0.85	0.86	0.88	0.80		

Currently, elementary and secondary education in Korea is largely funded by the Special Fund for Local Government Education. The education tax revenues are included in the Special Fund for Local Government Education and then used to fund education at elementary, intermediate and high schools. As illustrated in Fig. 2-15, the revenue sources for the Special Fund for Local Government Education include, in addition to the grants from the central government, revenues from local endorsement tax, municipal tobacco excise tax, etc. transferred by the local government.

Figure 2-15 | Public Education Finance Flowchart (as of 2010)



Source: Taxation Overview (2010) and the Local Education Grant Act.

2.5.2. The Rural Development Tax

The rural development tax was established to raise investment funds required to enhance the competitiveness of farming and fishing communities as a response to the conclusion of the Uruguay Round. It is to remain effective for a twenty-year period from July 1994 to June 2014. This tax is a surtax levied on, inter alia, tax relief amounts, securities transactions, acquisition tax amounts and comprehensive real estate tax amounts. Changes in the rural development tax revenues indicate that the total amount was around 1.3 trillion Korean Won or 0.3% of the GDP in 1995, when it was introduced in full-scale, and has remained at around 0.3% of the GDP since then, though with slight fluctuations. Rural development tax revenues are all transferred to the rural development tax administration account in the special fund for structural improvement of rural communities, some of which is used for balanced national development projects.

Table 2-23 | Changes in Rural Development Tax Revenues

(Unit: billion won, %)

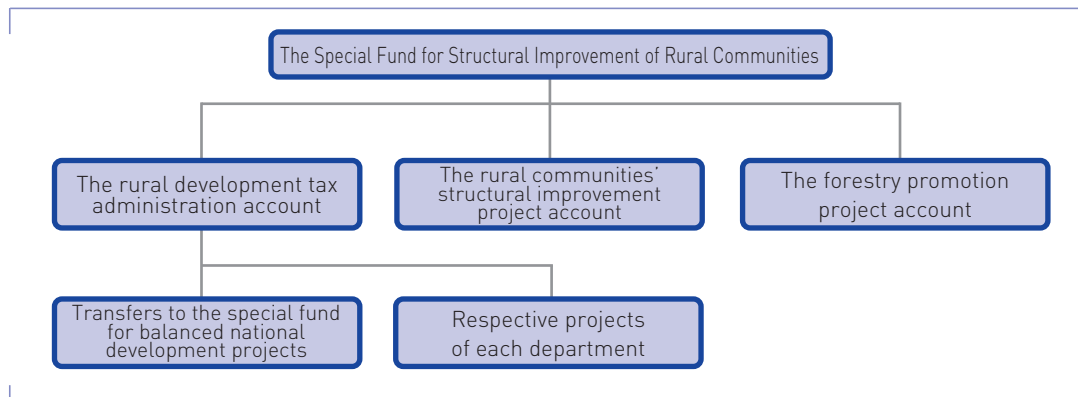
Year	'94	'95	'96	'97	'98	'99	'00	'01
Rural development tax amount	290	1,331	1,486	1,040	1,015	2,023	1,830	1,526
% in GDP	0.09	0.33	0.33	0.21	0.21	0.38	0.32	0.25
Year	'02	'03	'04	'05	'06	'07	'08	'09
Rural development tax amount	2,129	1,932	2,071	2,647	2,960	3,801	3,755	3,841
% in GDP	0.31	0.27	0.27	0.33	0.33	0.39	0.37	0.36

Table 2-24 | Rural Development Tax Bases (as of 2010)

Tax base	Tax rate
Tax relief amounts (internal tax relief, customs duties relief, local tax relief)	20%
Tax relief on savings	10%
Special excise tax amounts	10% (or 30% for golf course fees)
Securities transaction amounts	0.15%
Acquisition tax amounts	10%
Leisure tax amounts	20%
Comprehensive real estate tax amounts	20%

Source: Taxation Overview (2010)

Figure 2-16 | The Structure of Use of Rural Development Tax Revenues



3. Implementation Methods

3.1. Law Revisions

As an earmarked tax requires its revenues to be used for a particular type of expenditure, it affects both revenue and expenditure structures. With respect to law revisions, therefore, both of these aspects should be considered. As for tax laws, the Transportation Tax Act was enacted in September 1993. The substance of the same Act may be summarized as follows:

- Purpose: To secure such revenue source required to expand roads, urban railroads and other transportation facilities (Article 1)
- The objects of taxation, tax bases, tax rates and the persons obligated to pay are specified.
- Tax exemption, deduction and refund provisions
- Effectiveness: It is provided that the Act remains effective from January 1, 1994 to December 31, 2003.

Together with the Transportation Tax Act, the Enforcement Decree of the Transportation Tax Act was established as well.¹⁵ The Enforcement Decree provides for such matters as delegated by the Transportation Tax Act and such details as may be necessary to enforce the Act. The Transportation Tax Act and the Enforcement Decree of the Transportation Tax Act underwent a number of revisions in accordance with institutional changes: the replacement of

15. An enforcement decree is an administrative legislation and specifically refers to a presidential decree. Similar to this are enforcement regulations, which specifically refers to the ordinance of the applicable ministry. For example, the enforcement regulation for the Act as of 2010 is the Ordinance of the Ministry of Strategy and Finance.

the ad valorem duty with a specific duty, tax rate adjustments, the extension of the taxation period, etc. Particularly in late 2006, the Transportation Tax Act was revised into the Transportation, Energy and Environment Tax, where the purpose of the Act was amended into “to secure such sources of revenue as may be necessary for the projects for the expansion of roads, urban railroads and other transportation facilities and the promotion of public transportation, energy and resources related projects, and the projects for the preservation and improvement of the environment.”

Interestingly, Article 1 of the Act is merely a declaration of the transportation tax’s purpose, and does not prescribe exactly how and for what projects revenues it would be used for. This is because the Act on the Special Fund for Roads and Transportation Facilities does have such provisions. The Act on the Special Fund for Roads and Transportation Facilities as established in December 1993 contains the following substance:

- Purpose: To establish the special fund for roads and transportation facilities (hereinafter referred to as the “fund”) (Article 1)
- The revenue sources and expenditures (projects) for each account are specified.
- Provisions for transfers from the general fund¹⁶
- Effectiveness: It is provided that the Act remains effective from January 1, 1994 to December 31, 2003.

The Act on the Special Fund for Roads and Transportation Facilities also underwent a series of revisions: the Act was renamed the Act on the Special Fund For Transportation Facilities, and the allocation rates for the transportation tax were to be provided for in the Enforcement Regulations instead of the Presidential Decree (December 1995); the percentage rate of transportation tax revenues transferred was adjusted (December 2000); the effective period of the same Act was extended to 2006 (December 2003); and again extended to 2009 (December 2006).

December 2009 saw another major revision regarding the effective period. Up to that point, the special fund shared the same effective period with the transportation tax (or more precisely, the transportation, energy and environment tax). In contrast to the 2009 extension of the effective period of the transportation tax by three years to 2012, the effective period of the Act on the Special Fund For Transportation Facilities was entirely repealed so that it would remain effective indefinitely unless otherwise amended. Certainly, the provision for the transfer of transportation tax revenues to this special fund has remained in effect. Therefore, if the transportation tax is terminated under the sunset provision, the special fund will continue to exist, but the statutory ground on which transportation tax revenues are transferred to the special fund will cease to exist, requiring another source of revenue.

16. The Act includes provisions for, inter alia, the transfer of the transportation tax amounts under the Transportation Tax Act from the general fund.

3.2. Sunset and Extension of the Transportation Tax

The transportation tax was to remain effective from 1994 and 2003 until its effective period was extended by three years in late 2003 and then again in late 2006.¹⁷ As a sunset provision does not necessarily mean a program must invariably be terminated but is intended to review its adequacy, extension per se does not automatically deserve criticism. The extension, however, provoked controversy each and every time. Although the extension was debated also in late 2003 and late 2006, the most intense controversies were in 1998 and 2008.

As the transportation tax was to remain effective until late 2003, it is not easy to understand why its early termination was debated in 1998. This requires a look into the reformation of public finance programs back then. The financial crisis starting in late 1997 subjected the Korean economy to unprecedented ordeals and depression. The new government launched in 1998 took a number of reformatory measures to overcome the crisis. One of the measures taken in terms of the tax system was an effort to enact the Taxation System Simplification Act,¹⁸ which was an attempt to reduce the number of national taxes down to ten, as it was deemed unnecessarily complicated to maintain a total of thirty two tax items - seventeen national taxes and fifteen local taxes.

The tax items to be consolidated included the transportation tax, the education tax and the rural development tax, which were earmarked taxes, where such surtaxes as the transportation tax and rural development tax would be consolidated into the taxes on which they were levied, and the transportation tax into a single excise tax (which was then referred to as ‘special excise tax’). The Ministry of Agriculture and Forestry, the Ministry of Education and other related ministries strongly objected to the termination of the earmarked taxes, saying that it would likely shrink investment in rural communities, investment in transportation facilities, improvement of the educational environment, etc. The objection was even stronger, as the education tax was already perpetuated in 1990, and the rural development tax and the transportation tax had five to six years until their sunset dates.

Interestingly, while taxation authorities spearheaded the efforts to terminate the earmarked taxes, budgeting authorities did not welcome such efforts,¹⁹ as it would be counter-productive to the effects discussed above; the inclusion of the earmarked tax in an internal tax would in effect

17. The extension of the sunset date for an earmarked tax will be later revisited.

18. The official title of the Taxation System Simplification Act was the Proposed Act on Temporary and Special Measures for the Adjustment of Tax Laws etc. as required by the Simplification of the Taxation System.

19. At the time, different departments were in charge of taxation and budgeting: the Taxation Office of the Ministry of Finance and Economy was in charge of the taxation system and the Ministry of Planning and Budget was in charge of budgeting.

automatically increase the amount of grants to local governments and the education sector. Simplification of the taxation system alone with no changes in terms of budgeting would have required the allocation rates to local governments and the education sector to be reduced, where the budgeting authority knew it was very burdensome to negotiate with these parties. In the end, the objections raised by stakeholders and other departments prevented the bill from being presented before the National Assembly, resulting in the continuation of the transportation tax.²⁰

This debate resurfaced in 2008 as well. The Lee Myung-bak administration launched in the summer of 2008 announced a proposal to reform the tax system whereby each of the primary earmarked taxes - the transportation, energy and environment tax, the education tax and the rural development tax - would be consolidated into the taxes on which they were levied. This actually resulted in a repeal bill being presented to the National Assembly.²¹ The repeal of the earmarked taxes, however, faced strong objections from the opposing party and other stakeholders, and the bill continued to create controversy. With relatively minor objection, the transportation tax repeal bill passed the plenary session of the National Assembly in December 2008 and was to be amended into an excise tax beginning in 2010. The transportation tax and rural development tax repeal bills remained pending in the National Assembly, where discussions on it went around in circles up until mid-2009. In 2009, the government finally announced a proposal to reform the tax system and to extend and maintain the three major earmarked taxes. Accordingly, the sunset date for the transportation tax was extended by three years to 2012.

4. Assessment and Implications

4.1. The Building of Transportation Infrastructure

The greatest benefit of the transportation tax has undoubtedly been the expansion of the transportation infrastructure. Granted, it is difficult to tell exactly what kind of impact the expansion of transportation infrastructure has had on economic growth and how much it has advanced public wellbeing. It is, however, undeniable that transportation infrastructure in Korea has seen significant growth since the early and mid-1990.

20. A legislative bill proposed by the executive branch undergoes various phases including drafting, coordination with relevant departments, advance notice of legislation, formal examination, Cabinet conference and Presidential sanction, before being presented to the National Assembly.

21. It would be more precise to state that the transportation tax would have been discontinued on the sunset date as it was to remain until 2009.

Table 2-25 compares the level of transportation facilities in Korea between 1990 and 2004 - a decade after the introduction of the transportation tax. The effect of increased investment is clearly shown in terms of roads and ports and freeways especially. In contrast, the rate of increase in the level of railroad facilities appears to have been relatively slow, but qualitative growth seems more obvious, including the opening of the first phase of the Gyeongbu High-Speed Railway in 2004.²²

Table 2-25 | Comparison in Transportation-Related Facilities

Details \ year	1990 (A)	2004 (B)	(B) / (A)	Remarks
Four-lane or wider roads (km)	4,823	18,290	3.79	Total for roads (1990) 56,715 →(2004) 102,133
Double-track railroads	847	1,079	1.27	The sum of lengths of all railroads (‘90) 3,091 →(‘04) 3,135
Freeways (km)	1,559	2,923	1.87	
Port capacity (million tons/year) ¹⁾	190	501	2.64	Rate of container facilities (‘90) 57.4% →(‘04) 63.9%
Airport capacity (flights/year)	1,331	2,012	1.51	

Note: 1) The figure is based on trade ports.

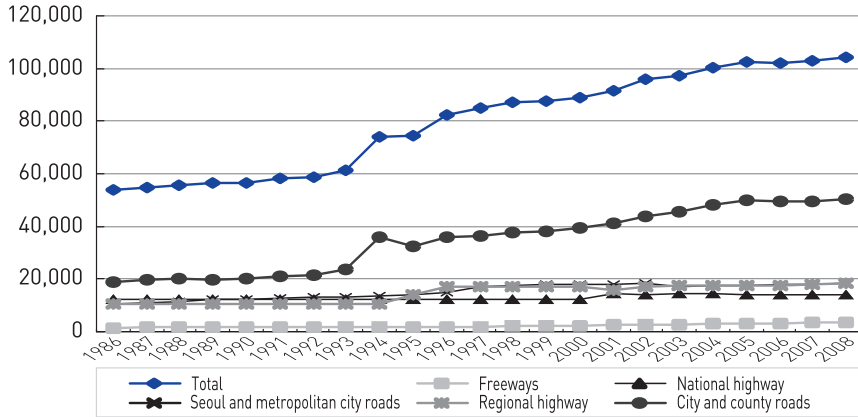
Source: The materials distributed in the Open Forum of the 2005 National Fiscal Operation Plan.

Fig. 2-17 illustrates annual statistics on roads in more detail. The total length of roads rapidly increased in the early 1990’s and steadily rose up until the mid-2000. Changes by road type indicates that the level of roads managed by city and county governments saw marked increases, which appears to be attributable to the effect of the support given to local governments by the central government.

22. Investment in railroads is deemed by many to have been sluggish to date, in comparison with investment in roads.

Figure 2-17 | Annual Statistics on Roads

(Unit: km)

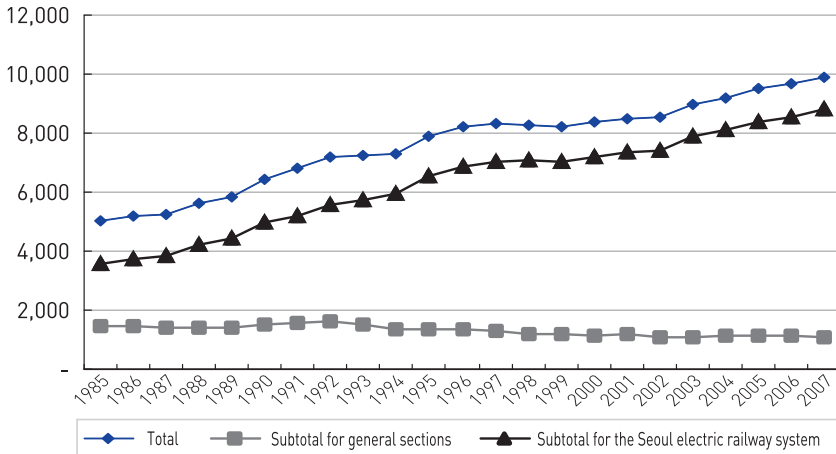


Source: The 2009 MLTM Statistics Yearbook

Fig. 2-18 illustrates changes in the annual number of railroad passengers, which has steadily increased since 1990. The number of electric cars, primarily used in urban transit systems, shows a similar pattern in Fig. 2-19. From the figure, it is clear that the number of electric cars rose greatly in the mid 1990's, which is materially affected when the urban rail system is completed in each city.

Figure 2-18 | Annual Number of Railroad Passengers

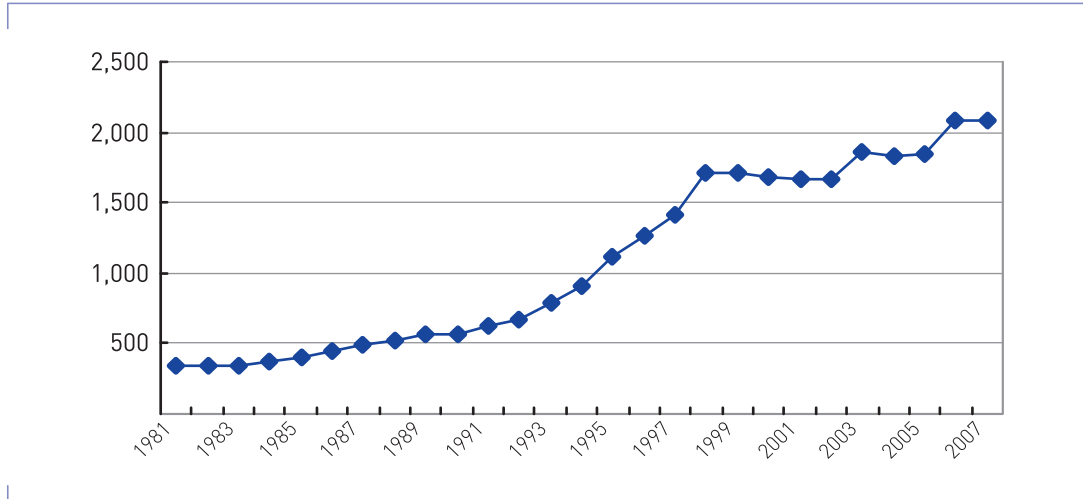
(Unit: 100 thousand persons)



Source: The 2009 MLTM Statistics Yearbook.

Figure 2-19 | The Number of Electric Cars in Urban Transit Systems

(Unit: cars)



Source: The 2009 MLTM Statistics Yearbook.

Despite such steady investment in transportation infrastructure, it is not clear whether accessibility of transportation in Korea today is indeed sufficient. The assessment of the levels of transportation is closely related and thus critical to whether the transportation tax, an earmarked tax, should be maintained.

The most frequently mentioned basis for the assessment of current levels are international comparisons. Table 2-26 summarizes Korea's standing in an international comparison in terms of transportation-related infrastructure. Korea's ranking show that it has fallen down in terms of roads, railroads and air transportation from 1994. In terms of water transportation, Korea stands in twenty-third place, a relatively lower ranking when considering the level of economic development, though the ranking has moved up. Although the numbers of reference countries in 2010 have certainly increased from 1994, the competitiveness of Korea in these sectors has conceivably decreased, considering that most of the newly included countries have been given much lower rankings. The international comparison shows that Korea's ranking in air transportation has significantly increased, which appears attributable to the completion of the Incheon Airport and its quality of services.

Changes in traffic congestion costs may be subject to a similar assessment. Table 2-27 shows changes in traffic congestion costs for recent years in Korea. Fortunately, the levels of traffic congestion costs rapidly rose until the early 2000's and then recently appear to have stagnated; however, the level of congestion costs still remains above 9 trillion Korean Won. Transportation convenience, distribution costs and congestion costs depend on a complicated mix of factors, and may not be resolved with supply policies such as investment in

transportation alone, as these are all linked to, inter alia: the overcrowded Seoul Metropolitan Area, the progress of urbanization, the percentage use of passenger cars and mass transit, balanced national development and the development of industrial parks. It therefore is deemed that complex and systematic measures and investment efforts are required.

Table 2-26 | International Rankings of Korea in terms of Transportation Infrastructure

	1994		2010	
	Index ²⁾	Ranking	Index ²⁾	Ranking
Roads	0.74	18	1.04	24
	Index ²⁾	Ranking	Index ²⁾	Ranking
Railroads	0.0313	18	0.034	25
	Index ³⁾	Ranking	Index ³⁾	Ranking
Air Transportation	27,109	12	63,078	15
	Index ⁴⁾	Ranking	Index ⁴⁾	Ranking
Quality of air transportation	5.69	31	8.67	4
	Index ⁴⁾	Ranking	Index ⁴⁾	Ranking
Water Transportation ⁵⁾	4.15	33	7.28	23
	Index ⁴⁾	Ranking	Index ⁴⁾	Ranking

Note: 1) The rankings were given among forty one countries in 1994 and among fifty eight in 2010.

2) km per square km.

3) No. of passengers transported by major airlines (1,000 persons).

4) On a 10.0-scale.

5) Port access was the item used in 1994, whereas water transportation, a broader item, was used for 2010.

Source: IMD (1994) and IMD (2010).

Table 2-27 | Changes in Traffic Congestion Costs on Inter-Regional Roads across the Country

(Unit: 100 million won/year)

Category		1998	1999	2000	2001	2002	2003
By road type	Freeway	19,087	26,928	21,509	19,845	20,651	20,126
	Regional national highway	23,468	38,567	51,381	56,073	57,350	55,980
	Regional highway	8,466	10,857	10,101	11,966	13,512	15,025
	Total	51,021	76,353	82,991	87,885	91,513	91,130
By vehicle type	Passenger car	21,539	29,889	35,547	38,862	39,793	45,574
	Bus	15,822	24,414	24,860	25,294	26,823	25,868
	Truck	13,660	22,049	22,584	23,728	24,897	19,689
	Total	51,021	76,353	82,991	87,885	91,513	91,130

Category		2004	2005	2006	2007	Annual average growth rate
By road type	Freeway	20,591	23,055	24,131	26,745	3.82
	Regional national highway	54,660	50,247	49,204	49,319	8.60
	Regional highway	16,053	17,635	18,468	17,667	8.52
	Total	91,305	90,937	91,802	93,731	6.99
By vehicle type	Passenger car	44,837	33,969	44,656	51,737	10.23
	Bus	26,432	33,961	26,342	18,286	1.62
	Truck	20,035	23,007	20,804	23,707	6.32
	Total	91,305	90,007	91,802	93,731	6.99

Note: Incorporation fixed costs (car ownership costs).

Source: Han-seon Cho and Dong-min Lee (2008).

4.2. Discussion of the Administration of the Tax System and Special Funds

The earmarked tax has been subject to much criticism especially among public finance researchers.²³ Certainly, the criticism against the education tax or the rural development tax as mentioned in Chapter III, Section 4 is much more severe than against the transportation tax, as these taxes do not have their own revenue sources, and there is absolutely no relation between revenue and expenditure. In contrast with this, the transportation tax has its own revenue sources, gasoline and diesel, and the link between fuel consumption and transportation facilities are more verifiable. Furthermore, Japan and the US used taxes imposed on fuels to build freeways and roads early on.

As mentioned in Chapter I, however, it should be noted that earmarked taxes have both merits and demerits, and the transportation tax is not free of controversies as well. Firstly, the distinction between the nominal effect and real effect on budget allocation as an issued should be addressed. In other words, the question is whether the existence of transportation substantially affects budget allocation or whether it is merely a means to enhance the level of acceptance of the tax levied on gasoline and diesel. A few criticize that the government maintains earmarked taxes just to raise the tax burden. Their argument is based on the fact that substantial amounts are annually transferred from the general fund to the Special Fund For Transportation Facilities. For example, if the transportation tax revenue is 10 trillion Korean

23. Literature criticizing the earmarked taxes of Korea includes, *inter alia*, Ju-seong Jeon (2005), Sang-won Park (2008), Yeong-gyu Lee and Seong-hwan Lee (2008).

Won and the transfer from the general fund amounts to 1 trillion Korean Won, the repeal of the transportation tax and the replacement of it with an excise tax would result in the same amount of revenues, and 11 trillion Korean Won may simply be transferred from the general fund. Since it is an empirical question what changes in budget allocation would occur if an earmarked tax is established or repealed, no easy conclusion is attainable in advance.

The second issue that should be addressed is determining its priority in budget allocation. This revolves around the question of whether the transportation tax is fully warranted at present despite that the tax has a substantial effect and thus ensures investment in transportation facilities. As discussed above, the transportation tax was fully warranted at the time of its introduction as investment in transportation facilities in Korea was substandard. Currently, however, Korea has a number of sectors requiring state revenue sources, including welfare requirements resulting from low fertility and aging population, defense-military requirements, investment in education and measures against the economic crisis. Although the stakeholders involved in these sectors argue for prioritizing investment, it is practically impossible to fill all these requirements using earmarked taxes. To put it another way, it is necessary to allocate national revenue sources in accordance with budget priorities; the transportation tax and other earmarked taxes hinder such flexible management.

These debates will rage again in late 2012, when the sunset date for the transportation tax approaches, and rational resolutions will conceivably require bold decisions on the part of stakeholders and policymakers.

4.3. Precautions to Introducing Earmarked Taxes

Established in 1994 and maintained to this date, the transportation tax in Korea has made significant contributions in the expansion of transportation facilities. However, as there has been much criticism recently, a few implications may be drawn.

Firstly, as an earmarked tax links expenditure and revenue, thorough judgment about the linkage is required. As the consumption of gasoline or diesel serves as an indicator for the demand for roads, it is highly warranted to use its revenues to build or maintain roads. The use of revenues in railroads and ports, however, may face criticism that the tax is merely designed to increase revenues. The recent use of transportation tax revenues for environmental improvement purposes may be understood in the same perspective. That is to say, the tax imposed on gasoline or diesel is interpreted to be intended to contain social costs such as air pollution resulting from the consumption of these fuels. Still in this case, it would be more warranted to use fuel tax revenues for air pollution prevention projects or environmental air improvement projects.

Secondly, if an earmarked tax is intended to be maintained for a limited period, it is desirable to calculate such period in an accurate manner and adhere to it. If such period is shortened to avoid criticism at hand, its purpose may not be sufficiently achieved after the sunset date, when it will become necessary to extend the effective period. This may result in decreased confidence in government policy among the public. It is therefore necessary to calculate required revenue sources and the effective period in an accurate manner and resolutely phase out the earmarked tax on the sunset date, creating a good precedent. This will serve as a good precedence from which the public may need to be persuaded when another earmarked tax is to be introduced due to other needs.

Thirdly, it is necessary to build a framework in which the necessity for budgets in each sector is clearly demonstrated, and funds are transparently allocated based on priorities. If all budgets may be ideally allocated, no earmarked tax would be necessary. It is argued in recent economic literature that earmarked taxes may serve to mitigate inefficiency in the presence of asymmetric information, bureaucratic moral hazard, inefficiency stemming from political limitations, etc. In other words, an existing rigidity may be mitigated through rigidity in the form of an earmarked tax. The most ideal situation, however, would be that revenues are transparently allocated based on priorities without friction. It is therefore necessary to make more fundamental efforts to create a structure that allows for the efficient allocation of funds in accordance with the achievements of fiscal projects and the needs of the public rather than to use earmarked taxes to resolve issues at hand.

References

- Seung-pil Kang *et al.*, “Transportation, 100 Traces of Development”, the Korea Transport Institute, 2006.
- The Ministry of Planning and Budget, “A Study on the Support Methods and Efficiency for Regional Highway Construction Projects”, Policy Verification Priorities (conducted by: the Korea Institute of Public Finance), 2000.
- The Ministry of Strategy and Finance, “Taxation Overview”, 2010.
- Dong-hyo Kim, Gang-gi Ahn, Gwang-bok Jeong, “’98 Nationwide Traffic Congestion Costs Calculation and Trend Analysis”, the Korea Transport Institute, 1999.
- Gyu-yeong Park, the National Archives of Korea, the Nara Archives Portal, “The Special Fund For Transportation Facilities”, 2007.
- Gi-baek Park, Sang-won Park and Won-ik Son, “Political Economy Models of Earmarked Taxes and Empirical Analysis”, the Korea Institute of Public Finance, 2007.
- Sang-won Park, “Proposals for Revamping of Earmarked taxes and Simplifying the Tax System”, the Korea Institute of Public Finance, 2008.
- Jae-hak Oh, Sang-woo Park, “Proposals for Reforming the Treasury Grant System Related to Investment in Local Transportation Facilities”, the Korea Institute of Public Finance, 2007.
- Yeong-gyu Lee, Seong-hwan Lee, “Issues with Earmarked Taxes and Special Funds and Directions for Reformation”, Economy Issue Analyses No. 26, the National Assembly Budget Office, 2008.
- Ju-seong Jeon, The Effect of Earmarked Taxes on Economic Efficiency and Tax Revenue, *Public Economy*, Vol. 10, No. 2, the Korea Public Finance Society, 2005
- Han-seon Cho, Dong-min Lee, “2007 Traffic Congestion Costs Estimation and Trend Analysis”, the Korea Transport Institute, 2008.
- Heon-gu Ha, Dong-seok Ok, Cheon-gon Kim, “An Analysis of the Validity of the Imposition of the Transportation Tax,” the Korea Transport Institute, 2001.
- The Korea Fiscal Institute, “The History of Public Finance of Korea in the 90’s”, 2002
- IMD, World Competitiveness Yearbook, 1994.
- IMD, World Competitiveness Yearbook, 2010.

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