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**Experience with Tax Reform in Korea**

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## I . Introduction

How can a tax system be "optimally" designed to raise revenue to finance necessary government expenditures? This question must be at the center of the economic policies in many countries. In developing economies, one more function is required -- that is, taxation itself must promote rapid economic growth. In other words, taxation should raise the proper amount of funds, and promote economic growth, presumably with tax incentives, while at the same time satisfying so - called principles of taxation -- efficiency, equity and simplicity.

It is well known, however, that these functions and principles always contradict one another. For example, too many tax incentives will not only add unnecessary complexity to a tax system but also cause distortion in resource allocation. Too much emphasis on equity generally hampers efficiency.

Perhaps, this is why there are so many tax reforms in developing economies. It is necessary to amend tax laws to correct the problems caused by an emphasis on one aspect. Korea is not an exception to such a trend. As a matter of fact, there have been many tax "reforms," and only a few of them were major ones, as can be seen from the next chapter.

In this paper, we explain past tax reforms of Korea and evaluate them. They are evaluated in relation to five aspects: tax revenue, impact on growth, equity, efficiency and simplicity. Beside this, suggestions for future tax reforms are given here.

The rest of the paper is organized as follows. In the next chapter, a brief history of the tax reforms of Korea will be explained. In Chapter III, they will be evaluated. Suggestions for future tax reforms will be made in Chapter IV, which will be followed by a brief conclusion in the final chapter.

## II. Brief History of Tax Reforms

### 1. Independence to War Rehabilitation Period<sup>1)</sup>

Like many other countries in the world, the history of Korean taxation conforms with that of capitalism. In this sense, the embryonic tax system in Korea was already formed in the late 19th century, then was further developed and distorted concurrently during Japanese domination.

That system, however, was far from "modern." A modern tax system in Korea was first introduced in 1948, when the government of the country was formed. In that year, a tax law committee was founded and eight fundamental tax acts were enacted. Major acts included the Income Tax Act, Corporation Tax Act, and Liquor Tax Act. After that, ten additional tax acts, including the Inheritance Tax Act and Commodity Tax Act, were enacted.

A number of changes in taxation were needed due to the Korean War (1950-1953). These changes were particularly aimed to provide the additional revenue required to finance the war. In this regard, the Land Tax Act and Temporary Tax Revenue Expansion Act were introduced in 1950, while a number of existing tax acts, such as the Income Tax Act, were revised. As the war continued, further reform of the tax system, especially with respect to collection, was done. For this, the Special Measure for Taxation and the Temporary Land Income Tax Act were enacted in 1951. As a result, the land income tax replaced the general income tax as the main source of tax revenue.

With the armistice in 1953, emergency wartime tax measures were

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1) This period classification, along with those of the subsequent sections, follows the classifications used in Choi and Han (1992).

adjusted to a normal peacetime tax system, especially to meet the needs of economic reconstruction. For this purpose, the Korean government sought the help of foreign experts. As a result, H.P. Wald's Report and Recommendation of the Korean Tax System was published in August, 1953.

Following the suggestions of Wald's report, subsequent reform of the tax system was made. The Special Measure for Taxation and the Temporary Tax Revenue Expansion Act were abolished, while the textile tax was absorbed into the commodity tax and the license tax was transferred from the central government to local authorities. The income tax system was divided into schedular taxes with flat rates and global taxes with progressive rates.

In order to increase tax revenue, the government introduced three new taxes in 1958: an education tax which was levied as a surtax to the personal income tax, an asset revaluation tax, and a foreign exchange tax. This last tax, introduced to absorb gains resulting from the difference between the official and market exchange rates, was abolished in 1963.

In the tax reform initiated by the Democratic Party Government in 1960, direct tax rates were generally reduced, but indirect tax rates were raised, and tax exemptions and deductions designed to promote exports and capital accumulation were increased substantially.

## 2. The Take-Off Period

In 1961, right after a coup, the Military Government began to work on

structural tax reform and measures to improve tax administration. It enacted the Temporary Measure for Tax Collection and the Special Measure for Tax Evasion Punishment in order to collect delinquent taxes. The government also revised the Income Tax Act, the Corporation Tax Act, and the Business Tax Act, and established a new tax accounting system.

Then, at the end of the same year, the government implemented a general tax reform with emphasis on eliminating irregularities within tax administration, laying the foundation for a lasting, modern tax system, and providing strong support for the First Five-Year Economic Development Plan. It was the first time that the role of taxation was extended to areas other than just securing enough funds. As a matter of fact, this new role of taxation, in other words, promotion of rapid economic growth, was in the center position of the tax policy until the early 1980s, when the main focus of the economic policy was changed. The other important characteristic of this reform was the streamlining of the local tax system.

Almost all of the major tax acts were revised. As a result, the total number of taxes was reduced to 28 from the previous 38. Then in 1962, the Adjustment Law for National and Local Tax and the National Tax Appellate Application Law were introduced. These tax reforms in 1961-62 are regarded as establishing many of the features of the present Korean tax system.

In 1966, there was an important change in the history of the tax administration of Korea. On March 3rd of that year, the National Tax Service (NTS)<sup>2)</sup> was established. Its main functions have been the assessment and collection of internal taxes. The establishment of the NTS marked the

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2) At first, it was called Office of the National Tax Administration(ONTA) and then the National Tax Administration(NTA).

beginning of modern tax administration.

There was another large scale tax reform in 1967. The aim of this reform was to promote rapid economic growth by supporting the Second Five-Year Economic Development Plan like that of tax reform in 1961-62. Tax incentives were widely introduced, particularly for this purpose. Twelve of the nineteen existing tax laws were modified extensively and a new Real Estate Speculation Control Tax Law was instituted. The most important characteristic of this reform is the introduction of the global income tax, although it was incomplete. A more complete form of the global income tax was introduced in the major tax reform of 1974, which will be discussed below. Finally, in an effort to enhance equity, the highest marginal rate of the inheritance tax was increased to 70% from 30%.

In 1974, the government undertook reform measures of the tax system, primarily to improve income distribution. Income redistribution was a particularly important policy issue at that time because it was widely recognized that the development strategy until then put too little emphasis on equity. The major features of the reform were as follows: A full-scale global income tax system was introduced as discussed above (see Table 1 for the tax bases and rates). Generous personal exemptions were also allowed to reduce the tax burden of low income earners. A new rate structure also lightened the tax burden of low income earners, but increased the burden on those in the high income brackets. A new capital gains tax was also introduced to replace the Real Estate Speculation Control Tax which had been in effect since 1968.

< Table 1 > Comprehensive Income Tax Rates (1974)

(Unit: thousand won, %)

| Comprehensive Income Tax Base |               | Tax Rates |
|-------------------------------|---------------|-----------|
| Over                          | Not more than |           |
| 0                             | 240           | 6         |
| 240                           | 480           | 10        |
| 480                           | 720           | 12        |
| 720                           | 960           | 15        |
| 960                           | 1,200         | 18        |
| 1,200                         | 1,500         | 21        |
| 1,500                         | 1,800         | 25        |
| 1,800                         | 2,400         | 30        |
| 2,400                         | 3,000         | 35        |
| 3,000                         | 4,800         | 40        |
| 4,800                         | 7,200         | 45        |
| 7,200                         | 12,000        | 50        |
| 12,000                        | 24,000        | 55        |
| 24,000                        | 36,000        | 60        |
| 36,000                        | 48,000        | 65        |
| 48,000                        |               | 70        |

In December 1976, the government carried out a large scale tax reform and introduced the Value Added Tax (VAT) and Special Excise Tax. Eighteen new tax laws were enacted or amended under the reform as well. This tax reform was mainly aimed at improving stable national life, meeting fiscal requirements for the Fourth Economic Development Plan, and further modernizing the tax system. The last objective in particular, that is, modernization of the tax system, is regarded as being accomplished by this reform.

The 1976 amendments to the internal tax laws generally went into effect

in January 1977, except for the Value Added Tax Law and the Special Excise Tax Law, which went into effect on July 1, 1977. By this reform, the traditional indirect tax system, which included a cascade-type business tax, was replaced by a consumption-type VAT and a supplementary special excise tax. This was primarily to simplify tax administration and promote exports and capital investment. A single, flexible rate of 10% was applied to all items subject to VAT<sup>3</sup>). The entertainment and food tax, which had been a local tax item, was incorporated into the national tax system. The registration tax, which had been treated as a national tax, was converted to a local tax starting January 1, 1977.

### 3. Liberalization and Stabilization Period

There was a dramatic economic policy change in the 1980s. Following the 2nd oil crisis in 1979 and the political turmoil of 1979 and 1980, the Korean economy was plunged into a deep recession. Under these new circumstances, the Korean government switched its economic policy directions fundamentally: from protection to competition and openness, and from regulation to liberalization and bold privatization. In this regard, the government began to reduce its intervention in the private sector. As a result, not many new functions were demanded from taxation.

Therefore, unlike the 1960s and 1970s, there were no major tax changes during the 1980s, up to 1987, although there were minor revisions of tax laws.

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3) This reflected the proposals put forth by J.C. Duignan, C.S. Shoup, and A. A. Tait.

In this period, major changes were made in two areas -- tax incentives and the curbing of land price hikes.

During the course of rapid economic growth, strategic industries were provided with a variety of tax incentives under many different schemes. The successive addition of new industries, firms, or individuals to the list of beneficiaries, and new types of incentives to the existing stock of incentive schemes complicated the tax system, generated inequities in the tax burden among individuals and sectors, and lessened the influence the tax preference measures could exert. In 1982, the Korean government took its very first step towards streamlining the tax incentive system. This will be discussed further in the next chapter.

The centerpiece of the tax reform in the late 1980s was how to control land speculation through tax measures. Speculation on land has been a serious economic and social problem in Korea and the resulting land price hike, caused much distortion in resource allocation, the distribution of income and wealth.

To solve this problem, various measures --mostly taxes-- were taken. Most important among these was the aggregate land tax (the global landholding tax) which was introduced in 1989. This tax replaced the excessive land holding tax which had been in effect for the previous two years. Also, the so-called "public concept" of the ownership of land was introduced<sup>4</sup>). To meet this principle, the excessively increased value of land tax was introduced in 1989, together with such nontax measures as the Excessive Residential Land Ownership Charge and the Land Development Charge. Other major nontax measures to curb the land price hikes included the introduction of a new

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4) In September 1988, a committee to study this concept was established to draft a proposal on various measures to deal with pending land problems.

system of assessing land: an upward adjustment of the assessment ratio.

Contrary to their intention, however, these measures are judged as (relatively) unsuccessful in their fight against land price hikes. As a result, three measures related to the public concept of land were all abolished in the late 1990s.

The Korean government finally introduced the real name financial transaction system in August 1993. The tax measure related with this is the inclusion of the financial income in excess of 40 million won into the global income tax base. It was announced that this would be enacted in the tax reform in 1994. This measure, however, was suspended in 1998 amidst the economic crisis, and is supposed to be reintroduced in 2001.

In 1994 and 1995, there were major tax reforms in Korea. The 1994 tax reform was designed to establish an advanced tax system which is characterized by low tax rates and a broader tax base in line with the tax reform in the U.S. in 1986.

Among many measures to achieve these goals, the most important ones are as follows: First, the income tax became closer to comprehensive income tax by incorporating interest and dividend income into the global income tax system (this has been applied since the beginning of 1996). Until 1995, interest and dividend income were assessed and withheld at a rate of 20%, separate from global income.

Second, the self-assessment system for individual income taxes was introduced and went into effect on income reported in 1996. This would have indeed been an important improvement in tax administration if it had proceeded as intended. The reality, however, is that government-assessment is

widely used even now.

Finally, corporation tax rates were reduced to improve the international competitiveness of domestic industries. As a result, the corporation tax rate of firms whose incomes were greater than 100 million won per year was reduced to 30% from the previous 32%.

Tax law amendment in 1995 was in line with that of the previous year, that is, lowering the tax burden and widening the tax base. For this, individual income tax brackets were adjusted (see Table 2). At the same time, the corporation tax rate was further reduced by 2% (see Table 3).

<Table 2> Individual Income Tax Brackets (1995)

| Tax Rate | Brackets         |                  |
|----------|------------------|------------------|
|          | Before           | Revised          |
| 10%      | ~ 10 million won | ~ 10 million won |
| 20%      | 10 ~ 30          | 10 ~ 40          |
| 30%      | 30 ~ 60          | 40 ~ 80          |
| 40%      | 60 ~             | 80 ~             |

<Table 3> Change in Corporation Tax Rate

| Tax Year | Tax Rate (private corporation)   |
|----------|--|
| 1995     | income ≤ 100 million won: 18% (19.35%)<br>income > 100 million won: 30% (31.50%) |
| 1996     | income ≤ 100 million won: 16% (17.20%)<br>income > 100 million won: 28% (30.10%) |

#### 4. Financial crisis and tax reform: 1998-1999<sup>5)</sup>

The economic crisis which started in late 1997 forced the government to initiate a series of comprehensive economic reform measures to overhaul the economy. As a part of such reforms, the government made a number of changes in tax laws to facilitate the restructuring process, stimulate investment and consumption, and broaden the tax base and tax revenue.

##### < Measures for restructuring >

One of the most important causes behind the crisis was too much debt owed by firms. Thus, the financial restructuring of the corporate and financial sectors was inevitable to overcome the crisis. In this sense, tax liability should neither discourage nor prevent companies and financial institutions from undergoing the necessary restructuring. Therefore, the government has exempted or reduced taxes on asset transactions that are needed for corporate and financial restructuring.

Tax incentives to encourage and accelerate restructuring were mostly granted to transaction-related taxes, such as the Capital Gains Tax, Acquisition Tax, and Registration Tax. These incentives are to encourage corporate mergers and acquisitions, business divisions, asset swaps, alienation of business assets, and contributions by company owners. For example, profits resulting from the revaluation of corporate assets after mergers and acquisitions have been made eligible for deferral from corporate income tax until the alienation of the

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5) This part is heavily drawn from "Korean Taxation," 1999.

revalued assets. Corporate mergers and acquisitions have also been exempted from the Registration Tax.

< Stimulating investment and consumption >

The withdrawal of foreign capital was one of the principal factors that precipitated Korea's economic crisis. Therefore, restoring the confidence of foreign investors and attracting foreign investment were overriding priorities.

To attract foreign direct investment (FDI), the Foreign Investment Promotion Act (FIPA) was enacted in 1998. In May 1999, provisions dealing with tax incentives for FDI was subsumed into the Special Tax Treatment Control Law (STTCL).

The principal objective of FIPA is to attract FDI by creating a more liberalized and favorable business environment for foreign businesses and providing tax incentives to certain types of FDIs. Under FIPA, foreign businesses and investors who make advanced technology FDI in Korea have been made eligible for exemptions from individual and corporate income taxes for the first 7 years and 50% reductions for the next 3 years. In addition, foreign businesses and investors have been granted exemptions from a number of local taxes (i.e., Acquisition Tax, Property Tax, Aggregate Land Tax, and Registration Tax) for a minimum of 5 years and 50% reductions for the next 3 years. Imported capital goods have also been made eligible for full or partial exemptions from customs duties, the special excise tax, and VAT.

As an additional measure to attract FDI, the long-protected Korean real estate market was completely opened to foreign investors in June 1998. In an effort to attract large-scale foreign investment, the government also introduced a

Foreign Investment Zone (FIZ) system. Foreign investment companies that receive the FIZ designation are eligible for government support and tax benefits.

Tax incentives were provided to small and medium-sized enterprises to stimulate employment and technology investment. They include tax exemptions on stock options, tax credits and exemptions on R&D, reduction of special excise tax on consumer electronic goods and automobiles, reduction of automobile tax, and reduction of capital gains tax.

< Broadening tax bases and increasing tax revenue >

Tax revenue has decreased significantly since the beginning of 1998 due to the recession. On the other hand, a sharp increase in government spending was necessary, particularly to meet part of the cost of restructuring, unemployment benefits, and social safety nets. These naturally led to a huge fiscal deficit.

To prevent an excessive deficit, the government raised tax rates on items that were believed to have been least affected by the economic crisis. Thus, among others, taxes on gasoline and diesel were raised, and the progressive taxation of interest income was switched to a proportional withholding tax. In addition to these, cigarettes became subject to VAT on top of the existing local tax.

In an effort to broaden tax bases, the government also curtailed tax exemptions and reductions. One notable example is the abolition of the VAT exemption on services supplied by professional service providers, e.g., lawyers and accountants. Also, the government enacted the Special Tax Treatment Control Law to control the widely-scattered exemption-related laws, making tax laws that allow exemptions and reductions subject to sun-set rules.

### Ⅲ. Evaluation of Tax Reforms

#### 1. Tax Revenue

As was pointed out, the major function of taxation is to secure enough funds for expenditures. We would like to see whether Korean taxation, with its many past reforms, has served this purpose well. As a result of much effort by the government to raise revenue, the share of total (national and local) tax revenue as a percentage of GNP, or the tax burden, increased from 6~7% in the mid-1950s to 20~21% in the 1990s, as can be seen in Table 4. The overall tax burden as a percentage of GNP, however, is still considered to be low compared to that of other countries.

The increasing trend in the tax burden was not smooth until the mid-1960s. This was due partly to fluctuations in economic activity and partly to revenue losses from extensive tax incentives and major tax reforms that reduced the tax rates of the personal and corporate income taxes and increased exemption levels of the personal income tax. For example, the fall in the tax burden ratio in 1963-65 was caused by the bad performance of the economy in the early 1960s.

This trend, however, became stable after the establishment of the National Tax Service (NTS), except for the decrease in the tax burden during 1972-1973. That is believed to be the result of the extensive tax reforms and the Emergency Decree on Economic Stabilization and Growth (the so-called "August 3rd Special Measure") in 1972.

As was mentioned in the previous chapter, the establishment of NTS was

a turning point in the history of tax administration in Korea and enabled the revenue increase. One interesting point is that the tax burden ratio increased even in a deep recession. Cooper (1994) argued that this may be due to the target revenue approach adopted by the NTA. In other words, a more stringent effort to collect tax revenue will be made if a decrease in the revenue is expected due to a recession.

<Table 4> Total Tax Revenue As a Percentage of GNP

(Unit: %)

| Year |      | Year |      |
|------|------|------|------|
| 1955 | 6.2  | 1977 | 16.6 |
| 1956 | 6.0  | 1978 | 17.1 |
| 1957 | 7.5  | 1979 | 17.4 |
| 1958 | 8.6  | 1980 | 17.9 |
| 1959 | 10.2 | 1981 | 18.0 |
| 1960 | 10.3 | 1982 | 18.2 |
| 1961 | 9.7  | 1983 | 18.5 |
| 1962 | 10.6 | 1984 | 17.7 |
| 1963 | 8.6  | 1985 | 17.3 |
| 1964 | 7.1  | 1986 | 17.0 |
| 1965 | 8.6  | 1987 | 17.5 |
| 1966 | 10.7 | 1988 | 17.9 |
| 1967 | 12.0 | 1989 | 18.5 |
| 1968 | 13.9 | 1990 | 19.7 |
| 1969 | 14.6 | 1991 | 19.3 |
| 1970 | 14.3 | 1992 | 18.7 |
| 1971 | 14.4 | 1993 | 18.9 |
| 1972 | 12.5 | 1994 | 19.9 |
| 1973 | 12.1 | 1995 | 20.7 |
| 1974 | 13.4 | 1996 | 21.3 |
| 1975 | 15.3 | 1997 | 21.3 |
| 1976 | 16.6 | 1998 | 22.9 |

Source: National Bureau of Statistics, *Major Statistics of the Korean Economy*, 1998.

Although the tax burden in Korea has been relatively light, the fiscal balance of the country was very sound (see Table 5), until it was hit by the economic crisis in 1997. This phenomenon reflects two facts about the role of the Korean government in the past: First, it has led rapid development through non-fiscal measures such as direct intervention, regulation, policy loans, etc. Second, there has been oversuppression on all or part of government expenditures.

Part of the overuppression was on expenditures on social welfare. We also have to note that the social security system in Korea has not been perfected until recently. The fully funded national pension, which was introduced first, has not paid full scale benefits yet. Also medical insurance and unemployment insurance are still in their initial stages.

## 2. Impact on Growth

One of the major functions of fiscal policy is to stimulate economic growth. Particularly for less developed countries, it is believed that governments should provide tax incentives for savings, capital formation, and export promotion to achieve rapid economic growth. Indeed, in such growing economies as Korea, the above-mentioned tax incentives have been widely used. What interests us is whether Korean taxation, with many of those incentives, contributed much to the rapid economic growth of the country.

<Table 5> Budget Surplus or Deficit

(Unit: 100 Million Won)

| Year | General Account |          | Consolidated Budget   |          | GDP <sup>2)</sup> |
|------|-----------------|----------|-----------------------|----------|-------------------|
|      |                 | % of GDP |                       | % of GDP |                   |
| 1972 | 239             | 0.6%     | -1,925                | -4.6%    | 42,119            |
| 1975 | 882             | 0.9%     | -4,661                | -4.5%    | 102,955           |
| 1980 | 3,192           | 0.8%     | -11,737               | -3.1%    | 381,484           |
| 1981 | 2,342           | 0.5%     | -21,109               | -4.4%    | 476,567           |
| 1982 | -582            | -0.1%    | -22,221               | -4.1%    | 547,210           |
| 1983 | 2,486           | 0.4%     | -9,506                | -1.5%    | 641,965           |
| 1984 | 1,890           | 0.3%     | -9,229                | -1.3%    | 736,051           |
| 1985 | -472            | -0.1%    | -7,133                | -0.9%    | 820,621           |
| 1986 | 2,605           | 0.3%     | -649                  | -0.1%    | 957,364           |
| 1987 | 11,132          | 1.0%     | 2,597                 | 0.2%     | 1,121,303         |
| 1988 | 20,180          | 1.5%     | 16,427                | 1.2%     | 1,331,342         |
| 1989 | 4,314           | 0.3%     | -191                  | 0.0%     | 1,491,647         |
| 1990 | 2,126           | 0.1%     | -15,782               | -0.9%    | 1,787,968         |
| 1991 | -17,354         | -0.8%    | -40,220               | -1.9%    | 2,165,109         |
| 1992 | 1,452           | 0.1%     | -17,029               | -0.7%    | 2,456,996         |
| 1993 | 4,341           | 0.2%     | 8,129                 | 0.3%     | 2,774,965         |
| 1994 | 17,218          | 0.5%     | 13,843                | 0.4%     | 3,234,071         |
| 1995 | 11,119          | 0.3%     | 12,415                | 0.3%     | 3,773,498         |
| 1996 | 3,618           | 0.1%     | 10,990                | 0.3%     | 4,184,790         |
| 1997 | -3,950          | -0.1%    | -69,590 <sup>1)</sup> | -1.5%    | 4,532,764         |
| 1998 | -8,366          | -0.2%    | -187,570              | -4.2%    | 4,495,088         |

Note: 1) In 1997, includes the figures foreign borrowing, of 5 billion dollars from IBRD and ADB.

2) At current prices.

Source: National Statistical Office, Korean Statistical Information System,

<http://www.nso.go.kr>

Although there has been much talk about this, rigorous analyses are rare. The most prominent among them must be those of Trella and Whalley (1991, 1992). These analyses are based upon their two (1991) and three (1992) sector CGE models. Since they are the only meaningful analyses on this subject to the best of the author's knowledge, our evaluation here will be centered around these papers.

According to Trella and Whalley, tax reforms in Korea have "probably facilitated rather than fueled high growth." This conclusion is based on their findings that the GDP growth rate in each of the phases in which the major tax regime changes have occurred has consistently been high.

What is more important is their second conclusion in the second paper. They concluded that Korean taxation has played a relatively modest role, accounting for 3.0 to 4.2% of Korean growth between 1962 and 1982, with only 3.6% between 1962 and 1972. This is equivalent to a 0.26 percentage point contribution to the growth rate over the period 1962-1982 (which is about half of the counterpart in the two sector model).

Thus, the contribution of taxation to the growth rate is indeed "small"! This interpretation, however, is open to criticism. Krueger (1992) raises the question on this in her comment to the paper. She started with noting the fact that half a percentage point on the growth rate for many other countries would be a major achievement. Moreover, it does not count the secondary effects of taxation, e.g. reducing the budget deficit and the rate of inflation. Therefore, she argues that the isolated direct effect of taxation, excluding all of these derivative effects, cannot be but small. In other words, taxation "may" have had substantial effect on Korea's growth contrary to Trella and Whalley's

conclusion.

It would be very difficult, however, to analyze the true contribution of taxation capturing all of these effects. International comparison may be needed. It should be admitted that taxation has certain limits as a tool for growth, considering the fact that its primary function is the provision of funds for the public good. Taking this into account, it is more appropriate to see whether taxation has contributed more to growth than other policy tools. We now turn to this subject.

There have been so many tax incentives in Korea that we cannot even list all of them here. The most important among them are special depreciation, investment tax credit and tax free reserves. A tax holiday was extensively used until its abolition in 1981.<sup>6)</sup> See the appendix for a more detailed explanation of tax incentives in Korea.

In the 1960s, the core of Korea's development policy was export promotion, and naturally the greatest emphasis was placed on those tax incentives designed to promote foreign exchange earning activities. In this period, a tax holiday was the most important tax incentive until the investment tax credit was introduced in 1967. The Korean government's efforts to promote exports in the 1960s were highly successful, and investment in light manufacturing export industries grew rapidly. It is, however, very difficult to measure the net effect of tax incentives because at the same time, very strong

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6) There are other tax incentives not discussed in this paper as follows: (1) Incentives for small and medium-sized enterprises, (2) incentives for local industrial development, (3) incentives for technical innovations, (4) incentives for foreign investment, (5) counter-cyclical investment incentives, and (6) incentives for energy conservation and environmental protection. For a detailed review, see Kwack (1985).

credit support, such as policy loans, was provided to the export industries.

What are the impacts of such tax incentives? Have they really contributed much to the growth of the economy as intended? The answer is neither affirmative nor negative. Almost all the research on the cost of capital and effective corporation tax rates in Korea pointed out that they have been somewhat effective, but not very much (see Kwack and Yoo (1994), and Yoo (1998)). Yoo (1995) showed that investment tax credits and accelerated depreciation were powerful. Other measures, particularly the policy loan, have been argued to be far more effective than tax incentives (see Cho and Kim, 1994).

Finally, it should be pointed out that the structure of tax incentives in Korea is very complicated and difficult to interpret. This aspect along with the efficiency of the tax incentives will be discussed in Section 4 of this chapter.

### 3. Equity

It goes without saying that equity is one of the most important factor in evaluating taxation. It is said, however, that Korean taxation leaves much to be desired in equity, both vertical and horizontal. Despite continuous efforts by the Korean government, the equity of taxation has not improved much. We now turn to this discussion.

For this, it is appropriate to look at the tax structure of Korea, including the revenue structure first, because it is the outcome of tax reforms. In other

words, it reflects the appropriateness of tax reforms most correctly. Currently, there are 16 national taxes including customs duties, and 15 local taxes (see Figure A1 in the appendix). It is often criticized that there are too many taxes which in turn cause the complexity of the tax system.

Now, let's look at the composition of the tax revenue. The major revenue sources of the central government are the consumption and income taxes while those of the local government are property related taxes. Since its introduction in Korea in 1977, VAT has become a major source of revenue in Korea. As shown in Table 6, VAT yielded 24.3% of total national tax revenue, making it the largest single tax in Korea. Although it seceded such position to personal income tax in 1998, due to the recession after crisis, such switch is reversed again in 1999 according to the tentative figure.

Taxes on wealth at the central government level in Korea, such as the inheritance and gift tax, assets revaluation tax, and securities transaction tax, are hardly significant in terms of their revenue yield. Revenue collected from the above taxes comprise only 2.1% of the central government's total tax revenue in 1998. Wealth taxes at the local government level such as the acquisition tax, property tax, registration tax, city planning tax, fire service facilities tax and automobile tax are major fiscal resources for local governments, accounting for 56.5% of their total tax revenue. Revenue from wealth taxes as a percentage of total tax revenues of both governments at all levels, however, is about 12.7%, which is not very high by international standards.

<Table 6> The Tax System in Korea (1997~1998)

(Unit: %)

| National Taxes                    | Share in total taxes |      | Share in national taxes |      | Local Taxes                 | Share in total taxes |      | Share in local taxes |      |
|-----------------------------------|----------------------|------|-------------------------|------|-----------------------------|----------------------|------|----------------------|------|
|                                   | 1998                 | 1997 | 1998                    | 1997 |                             | 1998                 | 1997 | 1998                 | 1997 |
| 1. Domestic taxes                 | 60.7                 | 60.9 | 75.6                    | 75.9 | 1. Ordinary taxes           | 17.7                 | 17.8 | 89.6                 | 90.3 |
| Personal income tax               | 20.4                 | 19.2 | 25.4                    | 23.9 | Acquisition tax             | 2.9                  | 3.3  | 14.6                 | 16.8 |
| Corporation tax                   | 12.8                 | 11.1 | 15.9                    | 13.8 | Registration tax            | 3.8                  | 4.6  | 19.3                 | 23.2 |
| Inheritance and gift tax          | 0.8                  | 1.3  | 1.0                     | 1.6  | License tax                 | 0.3                  | 0.3  | 1.4                  | 1.6  |
| Assets revaluation tax            | 0.5                  | 0.2  | 0.7                     | 0.3  | Inhabitant tax              | 3.0                  | 2.6  | 15.3                 | 13.4 |
| Excessive Land Holding Tax        | 0.0                  | 0.0  | 0.0                     | 0.0  | Property tax                | 0.7                  | 0.6  | 3.8                  | 3.1  |
| Excess profit tax                 | -                    | -    | -                       | -    | Automobile tax              | 2.5                  | 2.1  | 12.5                 | 10.6 |
| Value-added tax                   | 18.6                 | 20.7 | 23.2                    | 25.8 | Farmland income tax         | -                    | -    | -                    | -    |
| Special consumption tax           | 2.6                  | 3.7  | 3.3                     | 4.7  | Butchery tax                | 0.1                  | 0.0  | 0.3                  | 0.2  |
| Liquor tax                        | 2.1                  | 2.3  | 2.7                     | 2.9  | Horse race tax              | 0.4                  | 0.3  | 2.1                  | 1.8  |
| Telephone tax                     | 1.1                  | 0.8  | 1.4                     | 1.0  | Tobacco tax                 | 2.6                  | 2.4  | 13.2                 | 12.3 |
| Stamp tax                         | 0.4                  | 0.4  | 0.4                     | 0.6  | Aggregate-land tax          | 1.4                  | 1.4  | 7.2                  | 7.3  |
| Securities transaction tax        | 0.3                  | 0.4  | 0.4                     | 0.5  | 2. Earmarked tax            | 1.7                  | 1.6  | 8.7                  | 8.6  |
| Carry-over                        | 1.1                  | 0.7  | 1.4                     | 0.9  | City planning tax           | 0.9                  | 0.8  | 4.5                  | 4.1  |
| 2. Customs duties                 | 4.5                  | 6.7  | 5.7                     | 8.3  | Fire service facilities tax | 0.3                  | 0.3  | 1.8                  | 1.4  |
| 3. Surcharges                     | 15.1                 | 12.6 | 18.8                    | 15.8 | Workshop tax                | 0.4                  | 0.4  | 2.0                  | 1.9  |
| Education tax                     | 6.2                  | 5.8  | 7.7                     | 7.3  | Regional development tax    | 0.1                  | 0.1  | 0.4                  | 0.4  |
| Transportation Tax                | 7.7                  | 5.5  | 9.6                     | 6.9  | 3. Carry-over               | 0.3                  | 0.4  | 1.8                  | 1.8  |
| Special Tax for Rural Development | 1.2                  | 1.3  | 1.5                     | 1.6  |                             |                      |      |                      |      |
| Total                             | 80.3                 | 80.2 | 100                     | 100  |                             | 19.7                 | 19.8 | 100                  | 100  |

Source: Bank of Korea, Economic Statistics Yearbook, 1999.

As can be seen in Table 7, which shows the structure of the national tax system, Korea once heavily depended on domestic indirect taxes on goods and services which accounted for 52.4% of total tax revenue of the central government in 1980. In the 1990s, however, its share drastically decreased to around 38%. On the other hand, taxes on income and profits accounted for

only 36.0% of the total national tax revenue in 1994. This is an increase compared to the 25% level in the late 1970s. Although income taxes have gained their importance in recent years, income taxes do not occupy the central position in the revenue structure of Korea. The share of taxes on international transactions, entirely composed of customs duties on imports in Korea, has also gradually decreased to 4.9% in 1998 from 17.2% of the central government revenue in 1980.

These facts, i.e., largest share captured by VAT, relatively lower share by income and property taxes, explain one important characteristic of the structure of tax in Korea. In other words, the Korean government relies very heavily on indirect taxes. As shown in the second column of Table 8, more than 70% of total tax revenues, national and local, were revenues from indirect taxes until the mid-1980s, though the share decreased to 64% in the 1990s.

<Table 7> Structure of National Taxes, 1970~1998

(Unit: %)

|   | As % of total national taxes |       |       |       |       |       |       |       |       |       |
|---|------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|   | 1970                         | 1975  | 1980  | 1985  | 1990  | 1994  | 1995  | 1996  | 1997  | 1998  |
| Taxes on income, profit and capital gains | 35.0                         | 24.3  | 25.5  | 28.7  | 37.5  | 36.0  | 35.9  | 33.3  | 33.0  | 35.7  |
| Social security contributions             | 0.8                          | 1.0   | 1.2   | 1.7   | 5.1   | 8.8   | 8.7   | 10.3  | 10.2  | 13.4  |
| Taxes on property                         | 2.5                          | 3.9   | 0.6   | 0.7   | 2.4   | 3.2   | 2.6   | 2.0   | 2.1   | 1.8   |
| Taxes on goods and Services               | 46.5                         | 51.1  | 52.4  | 49.0  | 38.4  | 38.5  | 37.0  | 38.0  | 37.6  | 34.7  |
| Taxes on international transactions       | 13.8                         | 14.4  | 17.2  | 16.2  | 13.0  | 6.7   | 7.4   | 7.3   | 7.3   | 4.9   |
| Other taxes                               | 1.3                          | 5.5   | 3.0   | 3.8   | 3.6   | 6.8   | 8.4   | 9.1   | 10.0  | 9.5   |
| Total                                     | 100.0                        | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

Source: Ministry of Finance and Economy, Government Finance Statistics in Korea, 1980, 1991, 1995, 1997, 1999.

<Table 8> Characteristics of the Tax Structure, 1970~1997

(Unit: %)

|      | Direct taxes to total taxes <sup>1)</sup> | Indirect taxes to total taxes <sup>1)</sup> | National taxes to total taxes | Local taxes to total taxes | Local taxes to GNP |
|------|---|---|-------------------------------|----------------------------|--------------------|
| 1970 | 33.9                                      | 66.1  | 91.7                          | 8.3                        | 1.2                |
| 1971 | 36.9                                      | 63.1  | 91.9                          | 8.1                        | 1.2                |
| 1975 | 25.8                                      | 74.2  | 89.8                          | 10.6                       | 1.6                |
| 1976 | 29.6                                      | 70.4  | 90.5                          | 9.5                        | 1.6                |
| 1980 | 25.2                                      | 74.8  | 88.3                          | 11.7                       | 2.1                |
| 1981 | 25.7                                      | 74.3  | 88.9                          | 11.1                       | 2.0                |
| 1982 | 26.0                                      | 74.0  | 88.2                          | 11.8                       | 2.2                |
| 1983 | 24.5                                      | 75.5  | 87.8                          | 12.2                       | 2.4                |
| 1984 | 24.8                                      | 75.2  | 87.8                          | 12.2                       | 2.3                |
| 1985 | 27.8                                      | 75.2  | 87.8                          | 12.2                       | 2.1                |
| 1986 | 27.3                                      | 72.7  | 88.3                          | 11.7                       | 2.0                |
| 1987 | 29.8                                      | 70.2  | 88.2                          | 11.8                       | 2.1                |
| 1988 | 33.3                                      | 66.7  | 86.3                          | 3.7                        | 2.5                |
| 1989 | 36.5                                      | 63.5  | 81.8                          | 18.9                       | 3.5                |
| 1990 | 35.9                                      | 64.1  | 80.8                          | 19.2                       | 3.6                |
| 1991 | 35.8                                      | 64.2  | 79.1                          | 20.9                       | 3.7                |
| 1992 | 36.0                                      | 64.0  | 78.8                          | 21.2                       | 4.0                |
| 1993 | 35.7                                      | 64.3  | 78.1                          | 21.9                       | 4.1                |
| 1994 | 35.7                                      | 64.3  | 78.1                          | 21.9                       | 4.3                |
| 1995 | 37.6                                      | 62.4  | 78.8                          | 21.2                       | 4.4                |
| 1996 | 35.9                                      | 64.1  | 80.3                          | 19.7                       | 4.0                |
| 1997 | 33.8                                      | 66.2  | 80.3                          | 19.7                       | 4.3                |

Notes: 1) The classification of direct and indirect taxes is based on national income accounts.

2) General sales tax in Korea before July 1977 was the cess tax, which was replaced by the VAT.

Sources: Bank of Korea, Economic Statistics Yearbook, 1991, 1996, 1998.

Ministry of Finance, Government Finance Statistics in Korea, 1991.

National Bureau of Statistics, Major Statistics of the Korean Economy, 1991.

What do these imply? It implies that Korean taxation is still considered to be vertically inequitable because indirect taxes are more regressive than direct taxes. As a matter of fact, most tax incidence researches showed that direct taxes are progressive while indirect taxes are slightly regressive.

There are several researches on the tax incidence of Korea. Since

conducting new research or a full scale analysis of tax incidence is beyond the scope of this paper, we will summarize the results of previous research.

According to previous research, indirect taxes in Korea are generally regressive, except for the special excise tax. These results conform with our expectation. For example, Heller (1981), Han (1982), Hyun and La (1993), and Sung (1999) all showed such results (See Table 9 & Figure 1). For special excise tax, however, the results are split. Most of the research showed that the special excise tax is regressive, although this tax was introduced to offset the regressiveness of the VAT. Heller's result is somewhat mixed and should be interpreted as proportional. On the other hand, Hyun and La (1993) showed that this tax is progressive.

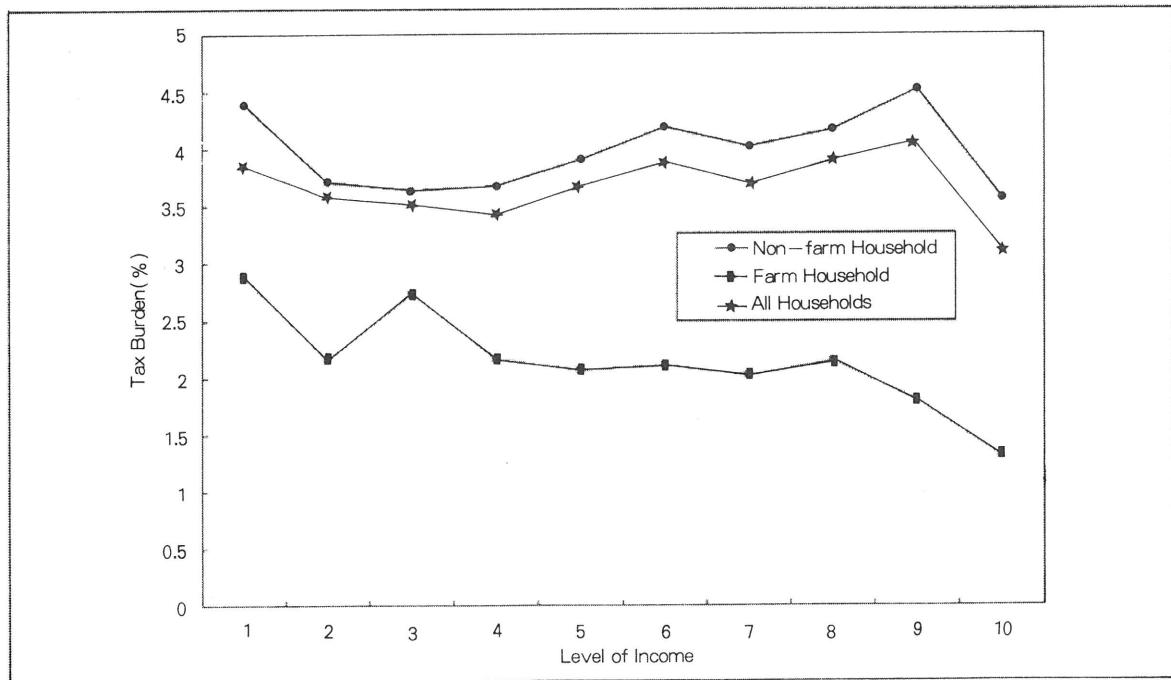
<Table 9> Indirect Tax Burden by Taxes

(unit: %)

|         | Special Consumption Tax |      | Liquor Tax |      | VAT  |      | Indirect Tax |      |
|---------|-------------------------|------|------------|------|------|------|--------------|------|
|         | 1984                    | 1991 | 1984       | 1991 | 1984 | 1991 | 1984         | 1991 |
| I       | 0.61                    | 0.37 | 0.25       | 0.24 | 4.31 | 3.77 | 7.34         | 4.39 |
| II      | 0.36                    | 0.32 | 0.13       | 0.21 | 2.46 | 3.20 | 4.27         | 3.71 |
| III     | 0.36                    | 0.34 | 0.12       | 0.20 | 2.30 | 3.05 | 3.95         | 3.64 |
| IV      | 0.42                    | 0.44 | 0.11       | 0.18 | 2.27 | 3.07 | 3.89         | 3.68 |
| V       | 0.34                    | 0.55 | 0.12       | 0.15 | 2.16 | 3.21 | 3.59         | 3.91 |
| VI      | 0.36                    | 0.73 | 0.10       | 0.15 | 2.10 | 3.31 | 3.47         | 4.19 |
| VII     | 0.39                    | 0.66 | 0.10       | 0.13 | 2.05 | 3.23 | 3.37         | 4.02 |
| VIII    | 0.37                    | 0.79 | 0.09       | 0.12 | 2.02 | 3.39 | 3.25         | 4.17 |
| IX      | 0.38                    | 0.97 | 0.08       | 0.09 | 1.97 | 3.45 | 3.10         | 4.52 |
| X       | 0.41                    | 0.78 | 0.07       | 0.07 | 1.88 | 2.72 | 2.85         | 3.57 |
| Average | 0.39                    | 0.69 | 0.10       | 0.13 | 2.10 | 3.15 | 3.41         | 3.95 |

Source: Hyun, J. and S. La, *Analysis of Tax and Social Assistance Policy: Korean Tax-Benefit Model*, 1993.

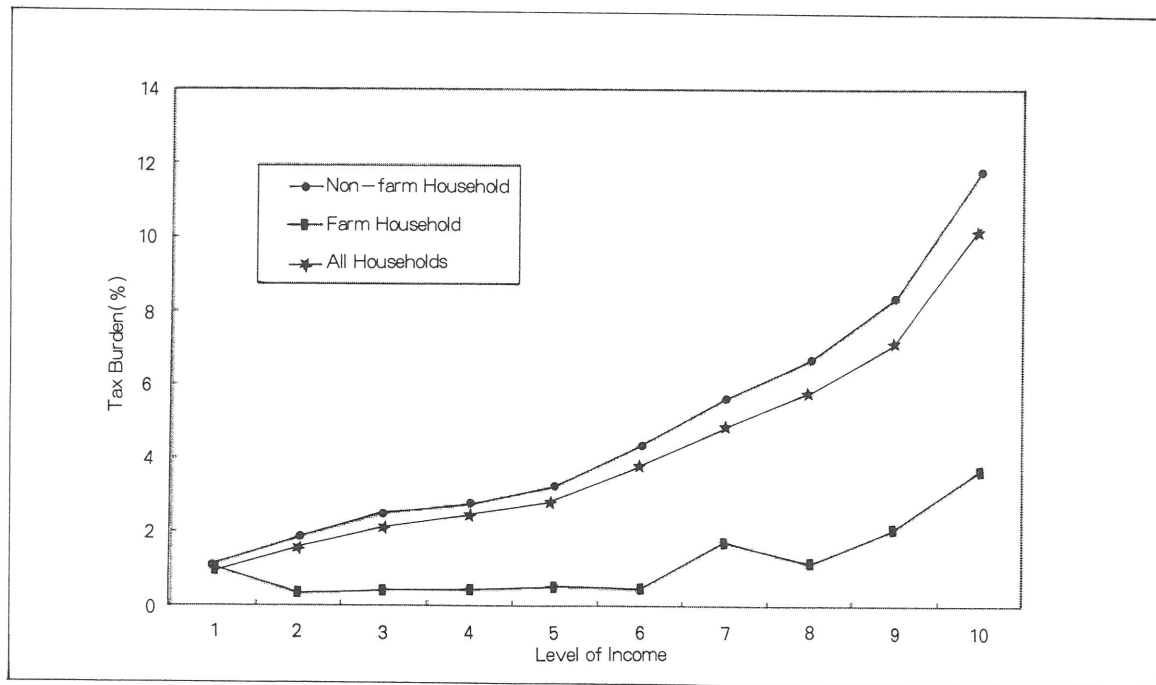
<Figure 1> Burden of Indirect Tax (Total, 1991)



Source: Hyun, J. and S. La, *Analysis of Tax and Social Assistance Policy: Korean Tax-Benefit Model*, 1993.

There is not much research on the incidence of direct taxes. Hyun and La (1993) and Sung (1999) all showed that income tax is progressive (See Table 10 & Figure 2). The latter also showed that the tax burden became more regressive after the crisis in 1997. For property tax, Kwack et al. showed that it is progressive under the "new" view, while it is regressive under, the "old" view (See Table 11).

<Figure 2> Burden of Income Tax (1991)



Source: Hyun, J. and S. La, *Analysis of Tax and Social Assistance Policy: Korean Tax-Benefit Model*, 1993.

<Table 10> Income Tax Burden (1991)

(unit: %)

|                             | Non-farm household | Farm Household | All Households |
|-----------------------------|--------------------|----------------|----------------|
| I                           | 1.10               | 1.04           | 0.91           |
| II                          | 1.85               | 0.31           | 1.58           |
| III                         | 2.49               | 0.41           | 2.14           |
| IV                          | 2.75               | 0.41           | 2.44           |
| V                           | 3.24               | 0.53           | 2.86           |
| VI                          | 4.36               | 0.44           | 3.85           |
| VII                         | 5.60               | 1.72           | 4.87           |
| VIII                        | 6.67               | 1.13           | 5.77           |
| IX                          | 8.32               | 2.07           | 7.14           |
| X                           | 11.75              | 3.68           | 10.26          |
| Average                     | 6.64               | 1.74           | 5.79           |
| Gini Index                  | 0.2907             | 0.3241         | 0.2974         |
| △                           | -6.3               | -1.7           | -5.2           |
| Atkinson Index              |                    |                |                |
| $\epsilon = 0.5$            | 0.0725             | 0.0851         | 0.0749         |
| △                           | -11.2              | -3.3           | -9.5           |
| $\epsilon = 0.9$            | 0.1269             | 0.1472         | 0.1307         |
| △                           | -10.4              | -3.0           | -8.8           |
| B-S Index                   |                    |                |                |
| Degree of Progressiveness   | 0.9158             | 0.7328         | 0.8509         |
| Degree of Regressiveness    | 0.0173             | 0.0810         | 0.0182         |
| Degree of Retrogression     | 0.0669             | 0.1862         | 0.1308         |
| Degree of Horizontal Equity | 0.1336             | 0.1523         | 0.0878         |

Source: Hyun, J. and S. La, *Analysis of Tax and Social Assistance Policy: Korean Tax-Benefit Model*, 1993.

<Table 11> Burden of Property Tax (1991)

(Ratio to Income Tax: %)

| Level of Income | Traditional Aspect |      |           | New Aspect |
|-----------------|--------------------|------|-----------|------------|
|                 | Total              | Land | Buildings | Total      |
| Average         | 0.80               | 0.46 | 0.34      | 0.68       |
| I               | 0.94               | 0.35 | 0.59      | 0.55       |
| II              | 0.66               | 0.23 | 0.43      | 0.35       |
| III             | 0.61               | 0.23 | 0.38      | 0.34       |
| IV              | 0.67               | 0.30 | 0.37      | 0.45       |
| V               | 0.68               | 0.32 | 0.36      | 0.48       |
| VI              | 0.74               | 0.39 | 0.35      | 0.58       |
| VII             | 0.77               | 0.44 | 0.33      | 0.65       |
| VIII            | 0.81               | 0.49 | 0.32      | 0.72       |
| IX              | 0.88               | 0.55 | 0.33      | 0.82       |
| X               | 0.88               | 0.62 | 0.26      | 0.94       |

Source: Kwak and others, *Reform Proposals for Property Holding Taxes - Concentrated on Land Tax*, Economic Policy Information Center, 1991

We have only talked about one part of equity - the vertical. The Korean tax system is regarded as horizontally inequitable as well. In particular, the inequality of the tax burden between the self-employed and employees is serious. Many analyses on tax evasion showed that more than 50% of the income of the self-employe is not reported while that of employees is nearly fully revealed (see Yoo (1997)).

#### 4. Efficiency and Simplicity

It is hard to tell which tax is relatively efficient or not unless rigorous empirical research is done. Unfortunately, there has been little of that. In

particular, research on the excess burden (or dead weight loss) which is essential to evaluate efficiency, is scarce. Thus, in this section, we will limit our discussion to the corporation tax by introducing analyses on the marginal effective tax rate, which will enable us to evaluate the distortion in resource allocation.

There are several researches on the marginal effective tax rate and the cost of capital. Since we cannot introduce all of them here, we will summarize the results of two representative papers and the implications on the neutrality of the corporation tax in Korea. The first one is a paper by Kwack and Yoo (1994). It extended the earlier result by Kwack (1985), which computed the effective tax rate basically based upon a Jorgenson-Sullivan type analysis. The effective tax rates computed in that paper are presented in Table 11.

The tax reduction effect, which is the difference between the statutory and effective tax rates, were fairly constant until the early 1970s. It then began to increase to a level above 10% in the mid-1970s. This seems to be due to the reinforcement of tax support to key industries, particularly the tax holiday. From 1982, however, the tax reduction effect began to decrease again and has been stable since then. This decrease is mainly due to the abolition of the tax holiday.

What interests us in this paper, however, is the distortion of resource allocation caused by tax incentives. That will be explained now. In Table 13, effective tax rates by asset type are presented. As can be clearly seen from this table, the effective tax rates of buildings and construction are higher than those of machinery and equipment.

<Table 12> Changes in the Effective Marginal Tax Rate (All Assets)

| Year | Statutory<br>Tax Rate <sup>1)</sup><br>(A) | Effective<br>Tax Rate I <sup>2)</sup><br>(B) | Effective<br>Tax Rate II <sup>3)</sup><br>(C) | Tax<br>Reduction<br>Effect (A-B) | A-C   | C-B  |
|------|--|--|---|----------------------------------|-------|------|
| 1960 | .330                                       | .300   | .319  | .030                             | .011  | .019 |
| 1961 | .242                                       | .215   | .237  | .027                             | .005  | .022 |
| 1962 | .220                                       | .189   | .216  | .031                             | .004  | .027 |
| 1963 | .275                                       | .227   | .269  | .048                             | .006  | .042 |
| 1964 | .330                                       | .281   | .324  | .049                             | .006  | .043 |
| 1965 | .330                                       | .284   | .324  | .046                             | .006  | .040 |
| 1966 | .385                                       | .328   | .377  | .057                             | .008  | .049 |
| 1967 | .385                                       | .319   | .372  | .066                             | .013  | .053 |
| 1968 | .495                                       | .436   | .453  | .059                             | .042  | .017 |
| 1969 | .495                                       | .434   | .449  | .061                             | .046  | .015 |
| 1970 | .495                                       | .438   | .454  | .057                             | .041  | .016 |
| 1971 | .450                                       | .395   | .414  | .055                             | .036  | .019 |
| 1972 | .400                                       | .311   | .375  | .089                             | .025  | .064 |
| 1973 | .430                                       | .369   | .437  | .061                             | -.007 | .068 |
| 1974 | .430                                       | .342   | .435  | -.002                            | -.005 | .003 |
| 1975 | .530                                       | .451   | .543  | .079                             | -.013 | .092 |
| 1976 | .530                                       | .428   | .531  | .102                             | -.001 | .103 |
| 1977 | .530                                       | .380   | .517  | .150                             | .013  | .137 |
| 1978 | .530                                       | .36  | .503  | .164                             | .027  | .137 |
| 1979 | .530                                       | .359   | .504  | .171                             | .026  | .145 |
| 1980 | .530                                       | .383   | .508  | .147                             | .022  | .125 |
| 1981 | .530                                       | .405   | .530  | .125                             | .000  | .125 |
| 1982 | .504                                       | .454   | .502  | .050                             | .002  | .048 |
| 1983 | .437                                       | .394   | .439  | .043                             | -.002 | .045 |
| 1984 | .437                                       | .378   | .393  | .059                             | .044  | .015 |
| 1985 | .437                                       | .395   | .397  | .042                             | .040  | .002 |
| 1986 | .437                                       | .386   | .392  | .051                             | .045  | .006 |
| 1987 | .437                                       | .397   | .398  | .040                             | .039  | .001 |
| 1988 | .437                                       | .397   | .403  | .041                             | .034  | .007 |
| 1989 | .437                                       | .395   | .404  | .042                             | .033  | .009 |
| 1990 | .437                                       | .402   | .407  | .035                             | .031  | .004 |

Notes: 1) Corporation tax rate  $\times$  (1+inhabitant tax + defense tax rate).

2) Effective tax rate considering all of the tax incentives.

3) Effective tax rate considering depreciation allowance only.

Source : Kwack and Yoo, *Tax Incentives and Economic Development*, 1994.

This is considered to be the result of the fact that most of the tax incentives were applied only to investments on machinery and equipment. However, since direct tax incentives such as the tax holiday (reintroduced in 1975) are applied regardless of asset type, effective rates of buildings and construction became fairly low during the late 1970s. Although the effective rates of buildings and construction have been higher than those of machinery and equipment, the actual costs of capital of the former have been lower than those of the latter. This was proven in two researches -- Kwack (1985) and Kim (1991). It is argued that the tax holiday is the main reason behind this phenomenon (see Kim (1991) for details).

As a final discussion on efficiency, it should be mentioned that Korean taxation has not served well as a device for correcting externalities. Environmental taxes have not yet introduced. The Liquor Tax and Tobacco Consumption Tax are not high enough to correct the externalities caused by drinking and smoking. This is why a tax rate hike on these taxes is widely discussed these days. Also, taxes on petroleum are considered insufficient to correct the problems of pollution and congestion. In particular, the big difference in the special excise tax rates between diesel and gasoline result in a price difference and cause distortion.

For simplicity, the current tax system in Korea leaves much to be desired. There are at least three main causes for this. First of all, there are too many taxes (31 as was shown in the previous section). Second, terms in tax codes are very difficult to understand by the general public. And third, too many tax incentives cause complexity so that even beneficiaries cannot know for certain how much benefit they can receive. Such complexity leads to a high cost of both compliance and administration. These in turn, become one of the sources of tax evasion and corruption.

<Table 13> Changes in the Effective Marginal Tax Rate by Asset Type

| Year | Statutory<br>Tax Rate<br>(A) | Buildings                         |                                    |                                     |      | Machinery and Equipment        |                                 |                                     |      |
|------|------------------------------|-----------------------------------|------------------------------------|-------------------------------------|------|--------------------------------|---------------------------------|-------------------------------------|------|
|      |                              | Effective<br>Tax<br>Rate I<br>(B) | Effective<br>Tax<br>Rate II<br>(C) | Tax<br>Reduction<br>Effect<br>(A-B) | C-B  | Effective<br>Tax Rate<br>I (D) | Effective<br>Tax Rate<br>II (E) | Tax<br>Reduction<br>Effect<br>(A-D) | E-D  |
| 1960 | .330                         | .313                              | .320                               | .017                                | .007 | .274                           | .319                            | .056                                | .045 |
| 1961 | .242                         | .228                              | .236                               | .014                                | .008 | .184                           | .242                            | .058                                | .058 |
| 1962 | .220                         | .203                              | .214                               | .017                                | .011 | .160                           | .218                            | .060                                | .058 |
| 1963 | .275                         | .252                              | .267                               | .023                                | .015 | .184                           | .274                            | .091                                | .090 |
| 1964 | .330                         | .304                              | .322                               | .026                                | .018 | .235                           | .328                            | .095                                | .093 |
| 1965 | .330                         | .304                              | .323                               | .026                                | .019 | .243                           | .328                            | .087                                | .085 |
| 1966 | .385                         | .342                              | .377                               | .043                                | .035 | .291                           | .376                            | .094                                | .085 |
| 1967 | .385                         | .343                              | .374                               | .042                                | .031 | .267                           | .368                            | .118                                | .101 |
| 1968 | .495                         | .463                              | .472                               | .032                                | .009 | .414                           | .442                            | .081                                | .028 |
| 1969 | .495                         | .459                              | .471                               | .036                                | .012 | .414                           | .442                            | .081                                | .028 |
| 1970 | .495                         | .465                              | .474                               | .030                                | .009 | .415                           | .443                            | .080                                | .028 |
| 1971 | .450                         | .418                              | .430                               | .032                                | .012 | .368                           | .403                            | .082                                | .035 |
| 1972 | .400                         | .295                              | .387                               | .105                                | .092 | .296                           | .365                            | .104                                | .069 |
| 1973 | .430                         | .368                              | .425                               | .062                                | .057 | .343                           | .427                            | .087                                | .084 |
| 1974 | .430                         | .350                              | .424                               | .080                                | .074 | .326                           | .440                            | .104                                | .114 |
| 1975 | .530                         | .437                              | .527                               | .093                                | .090 | .397                           | .551                            | .133                                | .154 |
| 1976 | .530                         | .450                              | .524                               | .080                                | .074 | .363                           | .537                            | .167                                | .174 |
| 1977 | .530                         | .396                              | .527                               | .134                                | .131 | .323                           | .514                            | .207                                | .191 |
| 1978 | .530                         | .347                              | .528                               | .183                                | .181 | .323                           | .487                            | .207                                | .164 |
| 1979 | .530                         | .350                              | .532                               | .180                                | .182 | .310                           | .486                            | .220                                | .176 |
| 1980 | .530                         | .372                              | .531                               | .158                                | .159 | .333                           | .487                            | .197                                | .154 |
| 1981 | .530                         | .376                              | .540                               | .154                                | .164 | .357                           | .514                            | .173                                | .157 |
| 1982 | .504                         | .467                              | .511                               | .037                                | .044 | .434                           | .487                            | .070                                | .053 |
| 1983 | .437                         | .404                              | .445                               | .033                                | .041 | .379                           | .431                            | .058                                | .052 |

Note: See the note in Table 11 for the meaning of tax rates I and II.

Source: Kwack and Yoo, *Tax Incentives and Economic Development*, 1994.

## IV. Suggestions for Future Reform<sup>7)</sup>

### 1. Simplification of the Tax System

As was pointed out in the previous chapter, a complex tax structure is one of the most distinguishing characteristics of Korea, with 16 national taxes and 15 local taxes. It is argued that Korea has too many taxes, and some taxes contribute little to revenue size, as shown in Table 6. Excess profits tax and farmland tax are good examples. Some taxes do not play an important role as policy tools, such as the excessively-increased value tax. Also, some taxes, like the butchery tax, would be better named as fees than as taxes. Earmarked taxes are another source that makes the Korean tax system so complicated. They are a sort of surtax levied on other tax amounts. For example, Special Tax for Rural Development is a surtax levied on the amount of exemption of corporation tax, individual income tax, customs duties, etc. The necessity for tax simplification has long been argued. In 1997, the Korea Institute of Public Finance proposed a tax reform to reduce the number of taxes from 31 to 13 (see Figure A2 in Appendix and KIPF reform proposal for details).

Another source of the complex tax system is tax incentives. As was indicated, the structure of tax exemptions and reductions is very complicated and difficult to interpret. It leads to a low level of tax compliance by

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7) This part is heavily drawn from Hyun, J., *Tax Administration in Korea: Policy Issues and Directions for Reform*, Korea Institute of Public Finance, 1999.

taxpayers. Therefore, it is necessary to abolish so many unnecessary incentives.

## 2. Reform of the VAT

Small businesses have been specially treated under the VAT system, since VAT was introduced in Korea, as in most other countries with VAT. They were given special consideration to reduce the cost of tax compliance.

There are two types of special treatment for small businesses; one is a simplified method and the other is a special method. The simplified method is applied to small businesses that have between 48 million won and 150 million won in turnover per year. The value-added ratios for this group are predefined according to types of business by the tax authority. For example, manufacturing has a value-added ratio of 22%, and restaurants and hotels have a value-added ratio of 50%. These ratios are, in general, lower than the real value-added ratio. Thus the same value-added ratio is applied to the same businesses, irrespective of the real situation of each business. The other method is the special method, which is applied to small businesses with less than 48 million won in turnover per year. This group has a tax liability of 2% of total turnover. It means that this group has a value-added ratio of 20%, irrespective of the type of industry or personal situation. Within the special method, no tax liability is applied to groups that have less than 26 million won in total turnover per year.

Table 14 shows the number of taxpayers and the relative size of the tax base for the group receiving special treatment under VAT. In 1997, around

60% of the total VAT taxpayers were considered small businesses and benefited from the special treatment in VAT. However, their share in the tax base was only 1.7%. We find that even though small business groups are very plentiful, their contribution is almost nothing. The reason for the large number of taxpayers receiving special treatment is that the tax authority is hard pressed to prove the exact size of total turnover for each business, since the businesses are more dependent on cash than on personal checks and credit cards. This is why self-employed businesses have a high level of under-reporting.

Invoices are very important records for cross-checking tax evasion under the VAT system. One distinguishing aspect is that small businesses receiving special treatment do not have to issue invoices with transactions. That is because their value-added ratios are already determined by the tax authority. Also, small businesses under special treatment do not want to receive invoices with their purchases, as they run the risk of letting the tax authorities know the exact size of their turnover if they receive invoices. It makes tax evasion possible for all taxpayers under the VAT system, since small businesses with no obligation of invoicing can be used as a method of tax evasion by others.

It has been widely criticized that the special treatment of small businesses in the VAT system is a crucial source for tax evasion. Although the special treatment was designed to help small businesses, an unexpected consequence is a high level of tax evasion. Therefore, special treatment two must be abolished. It might have to be done gradually or step-by-step to lessen possible political resistance by the affected group.

<Table 14> VAT Return (Taxpayers and Tax Base) by Tax Types

(Unit: %)

| Year | Taxpayers   |            |            |         |        | Tax Base    |            |            |         |
|------|-------------|------------|------------|---------|--------|-------------|------------|------------|---------|
|      | Corporation | Individual |            |         |        | Corporation | Individual |            |         |
|      |             | General    | Simplified | Special |        |             | General    | Simplified | Special |
|      |             |            |            | Total   | No Tax |             |            |            |         |
| 1993 | 5.2         | 34.6       | -          | 60.2    | 11.1   | 78.3        | 19.7       | -          | 2.1     |
| 1994 | 5.6         | 39.1       | -          | 55.3    | 18.0   | 78.3        | 19.9       | -          | 1.9     |
| 1995 | 5.9         | 43.7       | -          | 50.4    | 34.3   | 79.1        | 19.3       | -          | 1.6     |
| 1996 | 6.6         | 35.9       | 10.6       | 46.9    | 40.0   | 79.9        | 18.0       | 0.6        | 1.6     |
| 1997 | 6.6         | 34.3       | 16.7       | 42.4    | 36.9   | 81.2        | 16.1       | 1.2        | 1.5     |

Source: National Tax Administration, various years

### 3. Comprehensive Income Tax

It has long been argued that comprehensive income tax is the most desirable form of income tax, setting aside the debate on comprehensive income tax vs. personal expenditure tax. This "principle" must be true of Korea as well. Income tax in Korea, however, is far from comprehensive.

Currently, there are four different types of income-- interest, dividend, retirement, and forestry -- which are excluded from global income. Existence of such separately taxed income types has undesirable effects, particularly on equity. Since income tax is progressive, total tax burden will be lower, the larger part of income is taxed separately. Thus, the introduction of the comprehensive income tax is desirable. In particular, inclusion of interest income is important in relation to real name based financial transactions.

#### 4. Realization of Self-Assessment

All the tax systems became administered by self-assessment, after self-assessment was introduced in individual income tax in 1996. Even though the system was changed to self-assessment, the actual management has tended to be government-assessment. A typical example is that the tax authority makes predetermined tables that show the annual turnover and the level of income by type of business. Also, the tax authority has made this table available to taxpayers. Under this mechanism, taxpayers would report their turnover and income by just following their group guidelines of the amounts for their turnover and income. In addition, there is no incentive for the self-employed group to report their turnover and income honestly. Thus, predetermined tables must be abolished (or made unavailable to taxpayers), and the system should be switched to a true self-assessment system.

## V. Conclusion

In this paper, we explained the past tax reforms of Korea and evaluated them. It was shown here that many tax reforms were done and the result may not be considered successful. This does not mean that the current Korean tax system as a result of such reforms is a failure. Rather, we have to interpret that there is much room for further development in the current system.

As was shown in Chapter III, the Korean tax system does not seem to contribute much to the provision of funds for public goods. Although it did contribute to the rapid growth of this country, the scope of the contribution is limited. Factors that made these contributions possible--most notably tax incentives-- caused some inefficiency and complexity of the tax system. Also, there is much room for improvement as far as tax equity is concerned.

Suggestions for future reform are also given here. There are several proposals to simplify the tax system, reform the VAT by abolishing special treatment, introduce the comprehensive income tax, and realize a self-assessment system. Of course, these do not comprise the whole list, but only a major part of it.

In this paper, we did not attempt to add a new analysis or evaluation of past tax reforms. Instead, a survey of previous research was done. Conducting rigorous research -- theoretical and empirical -- on them is left for the future.

Since the economic environment of each country differs, one country's experience with tax reforms might not be directly applicable to other countries. Korea's experience, however, can be a good reference, to say the least.

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## A P P E N D I X

### < Tax Incentives >

First, let us present a brief historical review of Korea's major tax incentive policies. In the early phase of the country's development, tax incentives played a relatively limited role in influencing business investment behavior, largely because of the prevailing market imperfections. It was only after 1966, the year in which the National Tax Administration was established, that tax incentives began to play a certain role in Korean economic development.

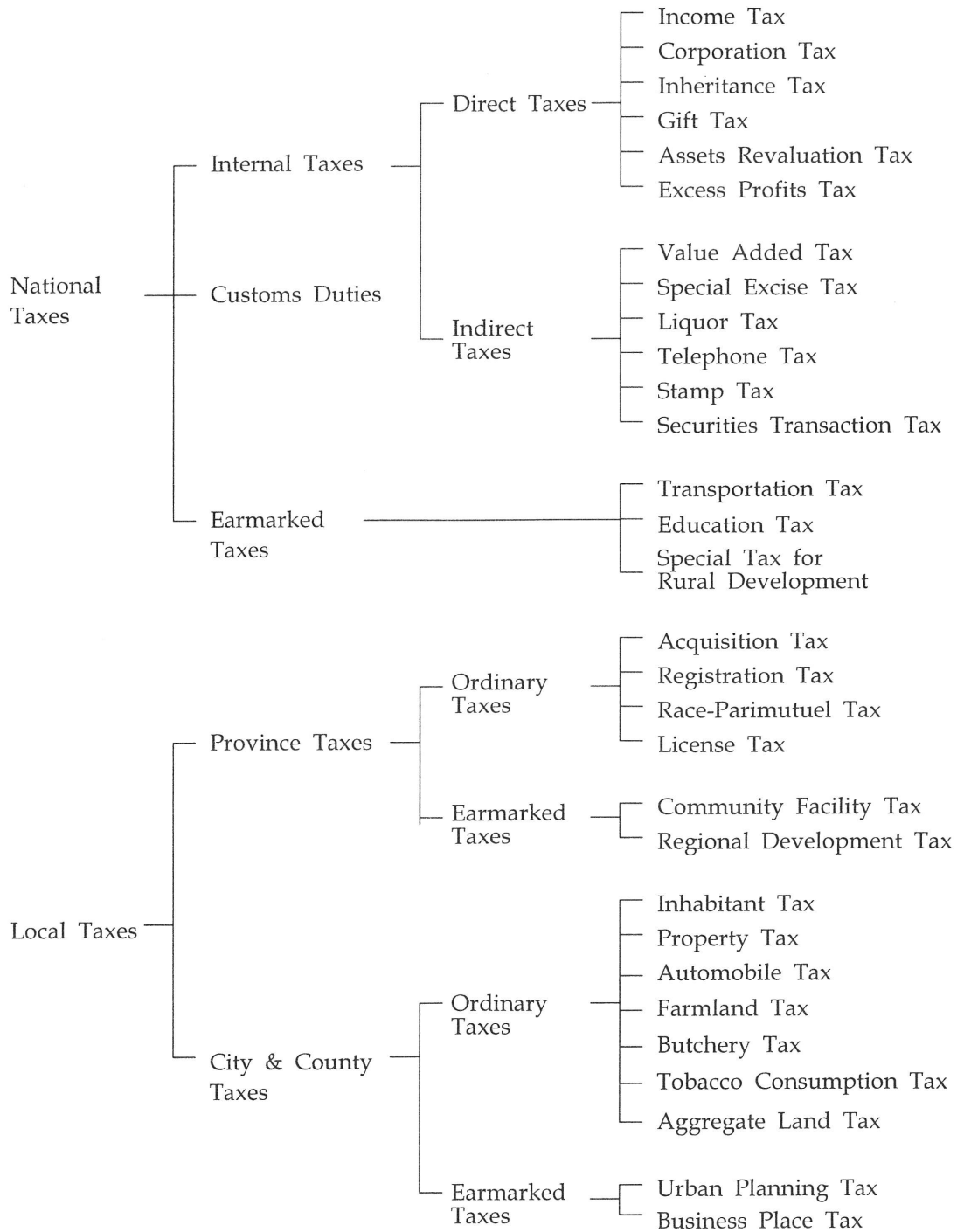
In the 1970s, more diversified and sophisticated tax incentives were provided during the course of the so-called heavy industrialization phase of the Korean economy, while incentives for export promotion were actually reduced in the early 1970s. During that decade, even though direct allocation continued to play a major role, in line with the increasing reliance of the government on market forces in the allocation of resources, tax incentive policies began to receive increasing emphasis. Particularly in 1974, there was a major tax reform and all major incentives were unified and rearranged under the title of 'Special Tax Treatment for Key Industries' in the Tax Exemption and Reduction Control Law (TERCL).

In the 1980s, tax incentives began to be used less than before under the perception that they were being overly abused. First, some industries were deleted from the beneficiary list. The 60% special depreciation system was completely abolished. The tax holiday option was abolished and the investment tax credit option was confined only to the machinery and electronics industries.

At the same time, the investment tax credit rate was reduced to 6% (10% for investments using domestic capital goods) from 8% (10%). Effective from 1983, it was again halved to 3% (5% for investments using domestic capital goods) reflecting the downward adjustment of the statutory corporation tax rate.

After the Uruguay Round and the subsequent launch of the WTO, the aforementioned trend of the reduction of tax incentives was accelerated. Even with these and other unexplained changes however, many tax incentives are still in effect today. For example, there are major incentives such as reserves for investment for small and medium-sized enterprises, investment tax credits, and various incentives for the induction of foreign direct investment.

<Figure A1> Korean Tax System



<Figure A2> KIPF Reform Proposal in Tax Structure

