Top Incomes in Korea, 1933-2010: Evidence from Income Tax Statistics

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A. Top Income Shares

A.1. Income Taxation Data

The global income tax system was first introduced in 1934 by the colonial government. The Income Tax Law classified the sources of income into three classes: corporate income (Class I income), interest from corporate bonds and bank deposits (Class II income) and earned income from other sources (Class III income). Class III income consisted of salaries, wages, bonuses, farm income (classified further into income of farm owners and tenants), business income, rental income from real estate, dividends, interest from financial assets other than those classified as the Class II income. Capital gains were not taxed. Class III income was taxed for the households earning annually more than 800 won. The data on the number of taxpayers, the amount of income, tax paid, and tax rate by income brackets can be obtained from *Chōsen Zeimu Tōkeisho* [Statistical Tables of Public Revenue of Colonial Korea] and *Chōsen Sōtokufu Tōkei Nenpō* [Statistical Yearbook of the Government of Colonial Korea].

After liberation, the global income tax system was abolished. Instead, taxes were withheld at source separately on labor income, business income, rental income from real estate, interest and dividends. Thus, the data on total income earned by taxpayers are not available for this period of the separate tax system although statistics on the amount of tax paid for each source of income are reported in *Kuksae Tonggae Yonbo*[Statistical Yearbook of National Tax] published by National Tax Service of Korea.

The global income tax system was reintroduced in 1975. Since then, the global income which includes interest, dividend, rents, wages, salaries, bonuses, and pension, excluding capital gains, was taxed. It should be noted that all taxpayers are not required to file global income tax returns.

Taxpayers with wage income which includes wages, salaries and bonuses do not have to file global income tax returns if the amount of income from sources other than wage income does not exceed a certain level. For this type of taxpayers, the wage income tax is withheld at source. Those whose financial income (interest and dividends) exceeds 40 million won should file global income tax returns.[1] Taxes on financial income less than 40 million won are withheld at source. Therefore, the statistics on global income tax do not cover all the top income earners because wage income tax is withheld at source. Therefore, we have to combine statistics of global income tax and those of wage income tax in order to account for all top income earners.

Global income tax statistics can be obtained from *Kuksae Tonggae Yeonbo* [Statistical Yearbook of National Tax] since 1976. Unfortunately, it does not provide separate statistics on tax withheld at source such as wage income for the period of 1976-1994. The data on wage income tax for 1979-85 can be obtained from the internal source of National Tax Service. The available information on income tax has become rich in recent years, but was poor in the earlier years.

Adjustments are needed to ensure the consistency of long-term series in Korea which experienced the different regimes before and after liberation. However, some adjustments could not be made due to data limitations. First, due to the fact that Korea was divided after liberation, the pre-liberation data include both South and North Korea; however, those after liberation cover only South Korea. Second, before liberation, the current year's tax was levied on the income earned in the previous year. The system changed after the liberation so that it was levied on the income earned in the corresponding year. Thus, we shift the pre-liberation data forward by one year so that data for the period of 1934-43 correspond to those for 1933-42. Third, during the colonial period, the total household income was taxed and the amount of tax was allocated to individual household members in proportion to each member's income. It was different from the system after liberation in which taxes were levied against individuals rather than households. We adjust the income tax statistics during the colonial period so that they may correspond to the individual-based income tax statistics. Fourth, as aforementioned, global income tax statistics exclude the financial income of those who are not required to file global tax returns. The criterion for the filing requirement changed over time. We cannot make adjustment for this due to data limitations.

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[1] It was legislated as the financial global income tax in 1996. However, the enforcement was suspended during the period of 1998-2000 due to the economic crisis. Prior to 2003, the financial global income tax was levied if the total financial income of a couple exceeds 40 million won. Since 2003, the number of individuals who are required to pay the financial global income tax decreased since the criterion changed to include the total financial income of an individual rather than that of a couple. We cannot make adjustments for the inconsistency of coverage due to data limitations.

A.2. Control Totals for Population and Income

To compute the top income shares, we need to define the denominators (or control totals) for population and income. It is desirable to define the population denominator as the total number of income earners; yet, it is not possible to compute it due to data limitations. Thus, we define the population denominator as the total number of adults, defined as 20 years old and above. Because studies on other countries adopt the same definition, it is good for an international comparison. We obtain the total number of adults from the population statistics published by the Korea Statistical Office. For the period before liberation, we interpolate the data by using the rate of change between the population census in 1930, 1935, 1940 and 1944. The number of adults is presented in Table A.1.

The control total for income is obtained from National Accounts. The table of income account by institutional sectors in National Accounts provides the data on the amount of income accruing to households and nonprofit institutions serving households by source, such as compensation of employees, operating surplus, and property income. From this, we need to subtract the items which do not belong to the earnings of individual households usually defined as earned cash income. They are employer's social contribution in compensation of employees, imputed rents to owner-occupier in operating surplus, and financial intermediation services indirectly measured (FISIM) in the financial income. We compute the control total for income by subtracting these items from the household income in National Accounts.[2]

For the colonial period, we use the National Accounts constructed by Kim ed .(2012). Because the income account by institutional sectors was not constructed in this study, we compute the household income by subtracting the imputed rents from the sum of compensation of employees and operating surplus. Although we have to exclude the retained corporate income from the operating surplus, we cannot make adjustment for this because we do not have the relevant information. However, it will not make much difference for our estimation of the income denominator during this period because the retained corporate income would be a relatively small amount. The data on the income denominator is presented in Table A.1.[3] The ratio of global income taxpayers to the total adult population increased over time but remained low. It was less than 5% before liberation and less than 10% after liberation. It implies that a large proportion of taxpayers only paid the wage income tax which was withheld at

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[2] The household income in National Accounts also includes the income of nonprofit institutions serving households which should be excluded for our purpose. However, due to the limitations of data, we cannot make adjustment for this. However, the amount is relatively too small to make much difference.

[3] The income denominator cannot be computed for the period of 1943-74. The income denominator for the period of 1941-42 cannot be computed since Kim ed.'s (2012) study ends in 1940, although the income tax statistics are available until 1942. The national accounts in Korea provide the income by institutional sectors after 1975.

source. Table A.1 also presents the total income and average income per adult at constant 2010 prices along with consumer price index to be used for the conversion. The data on consumer price index since 1965 are taken from the web-based database (KOSIS) of the Korea Statistical Office. Those before 1940 are obtained from the deflator for private consumption estimated by Kim ed. (2012: 507). We interpolate the data for the period between 1940 and 1965 by using the index for the Seoul area estimated by Park and Kim (2011).

A.3. Computing Top Income Shares

A.3.1. Pareto interpolation

We estimate the top income shares by using the number of taxpayers and the amount of income by income brackets obtained from the income tax statistics. To estimate the income shares of the top fractiles such as the top 10%, 1%, 0.1%, and 0.01%, we use the same Pareto interpolation method as Piketty and Saez (2001: 39). Pareto distribution has a cumulative distribution function specified as $F(y)=1-(k/y)^a$, where k and a are constants and a is called a Pareto coefficient. The distribution has a property such that the average income of taxpayers with an income level above a threshold income, y, is proportional to y by factor of b and $b=a/(a-1)$.

By using this property, we can estimate the top income shares as follows. First, we compute the cumulative proportion of taxpayers and income by dividing the number of cumulative taxpayers and the amount of cumulative income in each income bracket in the income tax statistics by the control total of population and income defined in A.1, respectively. Second, we select the income bracket which has the cumulative proportion of taxpayers, p, closest to the top fractiles such as the top 1%. If the lower income threshold for this bracket is s, using the above property of the Pareto distribution, we can estimate the Pareto coefficient $a(=b/(b-1))$ and $k(=s \cdot p^{1/a})$. Once we estimate a and k, we can compute the income share of the corresponding income group based on the relationship that $1-F(y)=(k/y)^a$. For example, if we compute the top 1% income shares, we place $1-F(y)$ equal to 0.01 and solve the equation in order to get the threshold income, y. Then, the average income of the top percentile is the product of y and b. The income share of intermediate fractiles such as the top 1-0.1% can be computed by the difference between income shares of the top 1% and the top 0.1%.

A.3.2. Adjustment of Income Tax Statistics for the Colonial Period

Income tax to be paid during the colonial period was counted by applying a corresponding tax rate to the household's net taxable income which equals the sum of income earned by all household members net of deductions. Then, the amount of tax to be paid by the household was allotted to each

household member by the share of each member in the total household income. Due to this feature of the tax system at that time, the income tax statistics of this period provide two kinds of tabulations. One tabulation (Case A data) provides the number of taxpayers defined as household and the amount of net taxable income by brackets of the net taxable income. The other tabulation (Case B data) provides the number of taxpayers defined as individual by tax-paid brackets without any information on income.

To adjust the data for our purpose, first, we compute the amount of income by adding deductions to the net taxable income. The deductions during this period consisted of deductions for wage income, dependent family, and insurance; the deduction rate was scheduled to rise with an income decrease. We also make adjustment for the deduction for dividends, the tax on which was levied after deducting 40% of dividends. The deduction rate of dividends is thought to increase as the amount of dividends increases unlike the deduction for wage income. Because the data do not provide the deductions by income brackets, we apply the ratio of total deductions to the total net taxable income in order to obtain the total income regardless of income bracket.[4]

Second, we should make an adjustment so that the tabulation in terms of household unit may be converted to the one in terms of an individual unit. Moriguchi and Saez (2008) made an adjustment in the Case A data for the pre-war period of Japan by substituting household income for household head's income. They considered that this adjustment does not make much difference because the income of household heads accounts for more than 95% of the household income. However, it may lead to an upward or downward bias in the estimation depending on the income groups. Therefore, we compare the estimates from Case A data and Case B data. By using Case B data with tax-paid brackets, we can compute the net taxable income corresponding to tax-paid in Case B data because we have the corresponding tax rates for all the brackets of the net taxable income. It allows us to compute the number of taxpayers by brackets of net taxable income in terms of individual household members from Case B data. However, the Case B data do not provide the amount of net taxable income by brackets. Therefore, we assume that the average net taxable income for each bracket equals $L+(H-L)*d$, where L and H are the lower and upper thresholds of the bracket.[5] Although d may be different among brackets, it is assumed that d is constant in order to compute d based on the total amount of net taxable income from Case A data.[6] Once we compute d, we obtain the amount of income by income

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[4] The ratios for wage income and deductions are 6.9-9.9% and 0.9-2.2%, respectively.

[5] The coefficient d locates the average in between L and H. For instance, if d equals 0.4, the average is greater than L by 40% of difference between H and L. For the brackets of top incomes, the number of taxpayers tends to fall as the income increases. Thus, the average income of the bracket will be less than the midpoint, which implies that d is between 0 and 0.5.

[6] When there is only one taxpayer in a bracket, usually observed in the highest income bracket, we can use the amount of income directly from Case A data. Although the assumption of constant d is restrictive, it will not make a

brackets.

Comparing the estimates of top income shares based on the two methods mentioned above, we find that the estimate of the top 0.01% income shares based on Case A data is slightly greater than that based on the Case B data, whereas it is the other way round for top 1% income shares. However, there is not much difference between the top 0.1% and 0.5% income shares. It is due to two biasing factors which work in opposite direction when we estimate the top income shares based on Case A data, by substituting household income for household head's income. The first factor causes an upward bias since we overestimate household head income by including the incomes of other household members in household head income. The second factor gives rise to a downward bias as we enlarge the top income group to lower income levels due to the omission of high-income members other than household heads in Case B data. In the estimation of the top 0.01% income shares, the first factor dominates the second factor and vice versa in the estimation of the top 1% income shares.[7]

In this paper, we use Case B data based on the individual unit in order to make the top income shares series in the colonial period consistent with those after liberation.

A.3.3. Combining Global Income Tax Statistics and Wage Income Tax Statistics

Due to the extensive withholding system, a small portion of taxpayers are required to file the global income tax returns as Table A.1 shows. In particular, taxpayers with wage income do not have to file global income tax returns if the amount of income from other sources does not exceed a certain level and the wage income tax is withheld at source in this case. Therefore, we complement global income tax statistics with wage income tax statistics in order to make up for a large number of wage income earners missing in the global income tax statistics. Because many taxpayers who file global income tax returns are also counted in wage income tax statistics, we have to remove those overlapping taxpayers when we combine the two income tax statistics.

Global income tax statistics provide the tabulation of number of taxpayers and the amount of income by income sources and by brackets of total income. The wage income in this tabulation is the double-counted amount of income when we combine the statistics. To subtract this part of the income, we have to make the income brackets of the two income tax statistics correspond each other. Faced with a similar problem, Moriguchi and Saez (2008: Appendix A.3.1) introduced an assumption that

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significant error because the total amount of net taxable income is obtained from actual data.

[7] Moriguchi and Saez (2008) used the data similar to Case A data when they estimated the top income shares in Japan for the pre-war period. In this case, the estimate of the top 1% income shares using the data based on the household unit has a significant downward bias compared with the estimate based on an individual unit. The bias becomes larger in the estimation of the top 5% income shares.

those with higher total income tend to have higher wage income. That is, they assumed that the ratios of wage income to total income are constant for each bracket.[8] Then, they computed the ratios by brackets of total income and converted the brackets of total income to those of wage income by multiplying the thresholds of total income by the ratios. This method just shifts the thresholds with the number of taxpayers and the amount of income unchanged.

Then, we remove the double-counted part by subtracting the number of taxpayers and the amount of wage income from the global income tax. We add up the global income tax statistics and the wage income tax statistics net of the double-counted part. To remove the overlapping part and to add up the two income statistics, we also have to make different income brackets of the two statistics correspond to each other. For this, we have to split the brackets of one tax statistics further with new thresholds set by using the other tax statistics. For this, we use the Pareto interpolation method.[9]

A.3.4. Additional Adjustments Made by Periods

To overcome the limitations of data, we made additional assumptions if allowed. The data for the period of 2005-2010 are sufficient enough to estimate the top income shares without any adjustment.

However, the data for 1995-2004 are not complete as those for 2005-2010. The tabulations of global income tax for 1995-2004 provide the amount of income by brackets of net taxable income rather than total income. They should be converted into the amount of total income by income brackets. We

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[8] This assumption of Moriguchi and Saez (2008) may not reflect reality if the distribution of income by sources varies much among individual taxpayers. Thus, we try to estimate the top income shares by making different assumptions on the distribution. However, the estimates are not so much different from 11.9%, the estimate based on the method of Saez and Moriguchi (2008). Thus, we adopt the method of Saez and Moriguchi (2008), which allows us to compare our estimate of top income shares in Korea with that in Japan.

[9] This method is different from the Pareto interpolation explained in A.3.1 which does not use the data on the upper thresholds. The Pareto interpolation in A.3.1 uses only the lower thresholds and the number of taxpayers and their income above the lower thresholds. This method which considers the income bracket as an open upper interval is suitable when we estimate the top fractiles income shares; however, it is not proper when we create additional brackets within an income bracket by a new threshold. Therefore, we use an interpolation method which uses both the upper and lower thresholds of an income bracket. First, to interpolate the number of taxpayers, we use the equation $H(y_{i+1})/H(y_i)=(y_i/y_{i+1})^{\alpha}$ induced from the Pareto cumulative distribution function where y_i and y_{i+1} are the lower and upper thresholds of the corresponding income bracket, respectively, and H is the share of taxpayers with income higher than the threshold income, y. From the equation, we can obtain α, the Pareto coefficient of the income bracket which is different from a in the equation of A.3.1. If we substitute y_c, a new threshold income, for y_i in the above equation, we obtain the number of taxpayer in a corresponding new income bracket. Similarly, we can interpolate the amount of income by using the equation $G(y_{i+1})/G(y_i)=(y_i/y_{i+1})^{\alpha-1}$ where G is the share of income above the threshold income, y.

compute the amount of deductions and exemptions (the difference between income and net taxable income) by using the data on the tax rate and the tax paid by brackets of net taxable income in income tax statistics and obtain the data by income brackets. The tabulations of wage income tax also provide the amount of net taxable income by brackets. We also need to convert the net taxable income into total income by adding exemptions and deductions to the net taxable income. However, the data source just provides the total amount of wage income without income brackets. Thus, we compute the ratios of wage income to net taxable wage income by income brackets from the data of year 2005 and apply the ratios to other years in order to convert the net taxable income into total wage income. Information needed to compute the double-counted amount of income when we combine the global income tax and wage income tax in A.3.3 is not available before 2005. Thus, from the data for the year 2006, we compute the ratios of the double-counted taxpayers to total taxpayers and their wage income to total wage income, respectively. We use the ratios for the period of 1995-2005 in order to remove the double-counted parts by income brackets.

The data for 1979-85 are similar to those for 1995-2004, as mentioned above. We do not have to make adjustments for wage income since we can obtain the amount of wage income by income brackets for this period. However, we do not make an adjustment for the overlapping parts for this period when we combine the global income statistics and wage income statistics. First of all, the relevant information is not available for this period. Second, this period is far too old to use the ratios computed from the data of year 2006. Third, during this period, only 3% of taxpayers filed global income tax returns. Thus, there were less overlapping taxpayers during this period compared with the more recent years. During this period, those who earned a large amount of financial income were exempt from filing global income tax returns as long as the financial income was their only income source. Overlapping taxpayers not adjusted in this period tend to yield an upward bias in estimating the top income shares, whereas the absence of financial global income tax leads to a downward bias.

No additional adjustment is needed for the period of 1933-40, except for the adjustments made in A.3.2. We also estimate the top income shares based only on the global income tax statistics, which are available since 1976. Although the top income shares estimated this way has a shortcoming for its narrow coverage of taxpayers compared with those estimated after combining two kinds of income tax statistics, they allow us to estimate the continuous series in the top income shares over 1976-2010 without missing periods.

The estimates of the threshold income and the average income for the top percentiles are presented in Tables A2 and A3. They are converted into real terms at constant 2010 prices by using consumer price index. The estimates of top income shares are presented in Table A4.

A4. Top Income Composition

The income tax statistics before liberation provide the amount of income by sources without dividing the taxpayers into separate income brackets. Therefore, the reported figures under the title of the top 1% income composition in Table A5 for 1933-42 are not exactly those for top 1%. The size of top income groups varies from the top 1.4% in 1933 to the top 4.8% in 1942. We cannot compute the top income composition between 1942 and 2006 since the income tax statistics do not provide relevant information for computing the top income composition. We obtain income composition for the top 10%, 1%, 0.1%, and 0.05% for the period of 2007-10 by combining the statistics of global income tax and wage income tax.

The top income composition is presented in Table A5 by income sources such as wage income(wages, salaries, bonuses, and pension), business income(unincorporated business profits, farm income, and self-employment income), rents (rents from farmland and real estate), interest and dividends. After liberation, rents from farmland disappeared due to the land reform; the rents from real estate were then included as business income.

B. Top Wage Income Shares

B.1. Wage Income Taxation Data

We cannot estimate the top wage income shares before liberation because the income tax statistics during this period do not provide data by sources of income. After liberation, income taxes were separately withheld at source. The *Kuksae Tonggae Yonbo* [Statistical Yearbook of National Tax] (*Semu Tonggae Yonbo* [Statistical Yearbook of Tax Affairs] before 1965) provides the data on the number of taxpayers, the amount of income, tax paid, and tax rates by income brackets back to the year 1957. As aforementioned, the data source does not provide statistics on separate tax withheld at source, such as wage income tax for the years 1976-1994. Although the data on wage income tax for 1973-85 can be obtained from an internal source, they are missing for the years 1986-94.

B.2. Total Wage Denominator

We need to define control totals for total wage earners and total wage income in order to estimate the top wage income shares. The number of total wage earners changes depending on the sources of data due to the different coverage of workers. The total number of employment in the *Kyungje Hwaldong Ingu Yonbo* [Annual Survey on Economically Active Population(ASEAP)], published by Korea Statistical Office is found to be considerably lower than the number of employment from income tax statistics in recent years which provide the comprehensive information on wage income earners including taxpayers, workers with wage level below the exemption point, and daily workers.

The reason is that among the workers counted in income tax statistics, there are some who are not classified as employed in the ASEAP. It is due to the difference in detecting the status of employment between the two data sources.[10] Here, we define the control total for wage income earners as the total number of employment in the ASEAP which includes regular, temporary and daily workers. The ASEAP provides data with consistent coverage back to the year 1963. Unfortunately, the income tax statistics does not report information on daily workers before 2008.

The total amount of wage income cannot be obtained from income tax statistics and thus computed from National Accounts. Wages and salaries in the table of income account by institutional sectors of National Accounts, net of employer's social contribution, are the most comprehensive; however, they include earnings of workers who are not classified as employed in the ASEAP. The wage income of this group is estimated to account for 6.7% of wage and salaries in National Accounts in 2009.[11] Because we do not have relevant data to compute the figure for other years, we deflate the wage and salaries of National accounts for other years by the same rate of 6.7%.

The amount of wage and salaries is available in National Accounts since 1975. For earlier years, we extrapolated our estimate in 1975 by using the growth rate of the compensation of employees presented in the table of distribution of national income in National Accounts published by the Bank of Korea (1982). The amounts of total and average wage income are converted into those at constant 2010 prices by using the consumer price index. The data are presented in Table B1.

B.3. Top Wage Numerator

The data on the top wage income are obtained by using the number of taxpayers and the amount of income by income brackets provided by income tax statistics. To estimate the income shares of top percentiles, we utilize the same method of Pareto interpolation as presented in A.3.1. Due to the fact that the information provided by the income tax statistics varies over years, we made assumptions to compute the top wage income. Because we already explained the data on wage income for the periods

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[10] The ASEAP defines a worker as employed if he or she works more than one hour for pay during a surveyed week which is much shorter than the time span for income tax statistics which detect the employment based on the record of pay during a year.

[11] The income tax statistics in 2009 allows us to estimate the proportion of income earned by daily workers who are not classified as employed in the ASEAP. The income level of this group of workers is very low. By assuming that workers with a lower level of wage income in the income tax statistics tend to be classified as unemployed, we compute the amount of wage income accruing to the workers who should not be classified as employed, so that the number of employment in the income tax statistics may equal the total employment in the ASEAP. This is estimated to be 6.7% of wage and salaries in National Accounts in 2009.

of 1995-2010 and 1979-1985 in A.3.4, we focus on the data of the earlier period here.

The data on income tax for the period of 1973-78 are taken from *Juyo Saemu Tonggae*[Statistics on Major Tax Affairs], an unpublished internal document reported in 1981. This source provides the number of taxpayers and the amount of tax paid by income brackets without specifying the amount of wage income. It is similar to the situation of Case B data in A.3.2. In A.3.2, we estimate the average income of an income bracket by estimating d when the average income is specified as L+(H-L)*d, where L and H are the upper and lower thresholds, respectively. Because we know the total income, we assume that d is constant in all the income brackets and thus, we can estimate d. However, we do not have information on total wage income here. Thus, we assume that the average wage income is 1.5*L for the highest income bracket and therefore, compute the average wage income for other income brackets by fixing d equal to 0.4, which is based on the estimate from the adjacent year when the data are available to estimate d. Finally, we compute the total wage income by income brackets by multiplying the number of taxpayers and the average wage income.

The data for 1968-72 are taken from *Kuksae Tonggae Yeonbo* [Statistical Yearbook of National Tax] which provides the tax rate, the number of taxpayers, the amount of income, and tax paid by income brackets. The amount of income in 1970-72 can be used directly because it equals the total wage income to workers. However, in 1969-68, we have data on the amount of net taxable income which needs to be converted to the amount of wage income taxpayers earned. Since the conversion rate cannot be estimated based on the data for this period, we use the conversion rate by income brackets for 1970 instead. The conversion rate in 1970 is the ratio of total wage income to net taxable income which is estimated by using the tax rate and the amount of tax paid by income brackets.

The Statistical Yearbook of National Tax in 1957-67 provides two kinds of tables on income tax statistics. One is the table which provides the tax rate, the number of taxpayers and the amount of income by income brackets. The information from this table is adequate for our purpose; yet, income bracket is too coarse to be used with a small number of brackets. The other table divides income groups into finer brackets but provides only the number of taxpayers. It is similar to Case B data in A.3.2. Thus, we apply the same method as used for Case B data to the latter table and estimate the amount of income by income brackets. We also use the conversion rate for 1970 to convert the amount of net taxable income into total wage income for this period because the table provides the amount of net taxable income only.

The threshold income and the average income for top income groups are presented in Tables B2 and B3. They are also converted to constant 2010 prices by using the consumer price index. Top income shares are presented in Table B4. Although wage income tax statistics go back to the year 1957, we can estimate the top income shares since 1963 because the ASEAP is available since 1963.

B.4. Marginal Tax Rates for Top Wage Income Earners

The marginal tax rates(MTRs) at the wage income threshold for the top wage income groups such as the top 10%, 1%, 0.1%, and 0.01% are estimated by using the method of Moriguchi and Saez (2008: Appendix C.3). We assume that a taxpayer at each threshold income has only wage income and forms a household with a non-working spouse and two dependent children. We compute the net taxable income by subtracting exemptions and deductions based on the income tax law in the corresponding years from the threshold income and use the tax schedule to obtain the MTRs. The estimates of MTRs are presented in Table B5.

By using the MTR at each threshold income, we can obtain the MTR for the average taxpayer of each top income group. To obtain the MTR of the average taxpayer in the top 0.1% group, we take the weighted average of the average taxpayers of the top 0.01% and the top 0.1-0.01%.

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Table A1. Adult Population, Number of Taxpayers, Income, and CPI

| | Total adult population(age 20 and over) | Number of taxpayers (thousands) | | Taxpayer/adult population (%) | | Toal income | Average income | CPI |
| | (thousands) | Global income tax | Wage income tax | Global income tax | Wage income tax | (billion won) | (thousand won) | (2010=100) |
	A	B	C	B/A	C/A	D	D/A	E
1933	11,094	154		1.4		14,107	1,272	0.0000103
1934	11,262	173		1.5		14,280	1,268	0.0000114
1935	11,432	193		1.7		16,170	1,414	0.0000122
1936	11,520	198		1.7		16,051	1,393	0.0000129
1937	11,609	237		2.0		19,104	1,646	0.0000140
1938	11,699	269		2.3		18,743	1,602	0.0000153
1939	11,789	276		2.3		16,491	1,399	0.0000196
1940	11,880	362		3.1		19,782	1,665	0.0000205
1941	11,992	534		4.5				0.0000213
1942	12,105	576		4.8				0.0000232
1976	17,959	402		2.2		83,236	4,635	12.6
1977	18,592	443		2.4		94,564	5,086	13.9
1978	19,249	475		2.5		111,224	5,778	15.9
1979	19,941	551	4,889	2.8	24.5	119,086	5,972	18.9
1980	20,653	589	5,005	2.9	24.2	107,503	5,205	24.3
1981	21,386	612	5,888	2.9	27.5	111,687	5,222	29.5
1982	22,109	714	6,041	3.2	27.3	120,347	5,443	31.6
1983	22,805	682	6,595	3.0	28.9	131,324	5,759	32.6
1984	23,475	748	7,071	3.2	30.1	148,740	6,336	33.4
1985	24,093	762	7,124	3.2	29.6	161,995	6,724	34.2
1986	24,702	855		3.5		185,049	7,491	35.2
1987	25,325	662		2.6		209,937	8,290	36.2
1988	25,962	704		2.7		233,492	8,993	38.8
1989	26,637	637		2.4		256,211	9,618	41.0
1990	27,454	740		2.7		283,125	10,313	44.5
1991	28,140	828		2.9		318,729	11,327	48.7
1992	28,818	934		3.2		344,085	11,940	51.7
1993	29,464	1,129		3.8		368,007	12,490	54.2
1994	30,078	1,256		4.2		404,667	13,454	57.6
1995	30,659	1,338	7,198	4.4	23.5	447,923	14,610	60.2
1996	31,168	1,216	6,958	3.9	22.3	486,670	15,614	63.2
1997	31,689	1,254	6,944	4.0	21.9	498,359	15,727	66.0
1998	32,134	1,166	6,269	3.6	19.5	477,469	14,859	70.9
1999	32,645	1,267	5,520	3.9	16.9	487,741	14,941	71.5
2000	33,738	1,529	5,934	4.5	17.6	512,345	15,186	73.1
2001	34,401	1,669	6,447	4.9	18.7	519,834	15,111	76.1
2002	35,021	1,842	6,188	5.3	17.7	534,899	15,274	78.2
2003	35,598	1,905	6,258	5.4	17.6	543,903	15,279	80.9
2004	36,072	1,943	6,268	5.4	17.4	559,652	15,515	83.8
2005	36,437	2,279	6,107	6.3	16.8	579,632	15,908	86.1
2006	36,961	2,736	6,621	7.4	17.9	601,400	16,271	88.1
2007	37,425	3,074	7,749	8.2	20.7	619,847	16,562	90.3
2008	37,971	3,584	7,981	9.4	21.0	616,895	16,247	94.5
2009	38,440	3,571	8,541	9.3	22.2	617,346	16,060	97.1
2010	38,946	3,785	9,244	9.7	23.7	638,059	16,383	100.0

Note: 1) Statistics are for all Korea(North and South combined) before liberation and for South Korea after liberation.

2) Total income and average income are at constant 2010 prices.

Table A2. Threshold Income of Top Income Groups

	P99.99	P99.95	P99.9	P99.5	P99	P95	P90
1933	185,136	74,267	46,849	16,099	10,574		
1934	204,486	74,608	47,750	15,359	9,576		
1935	203,989	75,431	48,587	15,589	9,686		
1936	186,339	71,454	45,799	14,952	9,290		
1937	230,471	89,483	54,298	16,233	10,076		
1938	223,658	84,185	52,474	16,527	10,425		
1939	204,640	71,145	46,085	13,768	8,762	2,902	
1940	244,524	83,155	54,223	16,849	10,231	3,383	
1979	134,528	76,165	59,973	32,722	25,451	12,746	8,620
1980	131,681	71,280	49,722	30,250	23,515	12,118	7,681
1981	129,168	69,434	53,369	28,930	22,590	11,868	8,458
1982	135,663	70,123	54,625	31,498	24,662	13,301	8,728
1983	148,668	80,784	62,378	34,124	26,454	14,289	9,013
1984	164,008	83,902	65,254	35,865	28,537	14,661	9,276
1985	176,154	83,921	64,847	36,524	28,729	15,995	10,274
1995	491,648	203,713	145,270	78,818	59,355	37,894	27,176
1996	537,942	235,608	167,108	87,999	65,729	45,555	38,402
1997	565,959	246,090	176,106	92,871	70,157	46,914	39,543
1998	448,465	192,108	138,262	78,374	59,922	42,164	35,935
1999	486,342	224,510	163,549	89,336	67,751	44,563	37,462
2000	567,539	228,883	179,544	100,104	76,304	48,019	39,997
2001	638,609	255,093	190,016	103,341	78,355	48,281	39,660
2002	690,605	274,862	208,094	96,713	86,720	50,171	40,455
2003	715,838	282,083	211,466	97,854	88,245	50,879	40,844
2004	798,205	307,253	206,042	114,137	93,132	53,643	37,672
2005	856,008	321,897	216,150	110,785	88,853	49,590	34,004
2006	948,605	361,709	246,695	123,879	99,602	62,413	41,989
2007	1,070,223	398,680	268,306	125,248	96,463	58,170	38,765
2008	1,051,085	399,573	270,898	125,218	97,522	57,701	37,631
2009	1,022,569	397,032	270,642	124,348	96,264	56,430	36,053
2010	1,104,380	423,467	283,886	135,564	104,948	57,063	36,201

Note: 1) Statistics are for all Korea(North and South combined) before liberation and for South Korea after liberation.

2) P99.99 denotes the threshold income of the top 0.01% income group.

Unit: Thousand won at constant 2010 prices

Table A3. Average Income of Top Income Groups

	top 0.01%	top 0.05%	top 0.1%	top 0.5%	top 1%	top 5%	top 10%
1933	359,055	156,610	106,495	40,912	26,871		
1934	355,881	156,563	105,868	39,632	25,540		
1935	359,875	158,179	107,221	40,527	26,083		
1936	345,633	151,223	102,622	38,906	25,080		
1937	385,462	174,275	116,965	43,171	27,589		
1938	480,069	189,942	124,160	44,661	28,512		
1939	405,180	159,368	105,667	37,695	24,080	8,387	
1940	473,861	187,105	123,566	44,549	28,346	9,841	
1979	512,514	185,821	122,936	57,197	42,802	22,290	16,142
1980	372,248	148,377	103,502	51,511	38,885	20,587	14,990
1981	311,005	135,555	98,583	49,158	37,303	20,148	14,952
1982	290,985	130,921	96,980	51,531	39,553	21,825	16,143
1983	268,720	134,996	102,570	55,748	42,952	23,594	17,382
1984	349,532	156,217	114,080	60,333	46,560	25,081	18,494
1985	428,742	179,165	128,467	63,844	48,125	26,082	19,393
1995	972,494	408,145	286,940	133,403	100,460	56,029	42,656
1996	1,125,617	468,747	328,597	151,973	113,513	60,450	50,959
1997	1,147,621	478,519	337,094	155,989	117,839	62,271	52,487
1998	834,256	365,999	261,673	127,911	97,797	54,803	46,707
1999	1,076,139	444,339	313,043	148,645	112,730	59,450	49,977
2000	1,289,221	517,487	359,786	164,556	125,432	65,219	54,323
2001	1,448,958	578,410	392,336	172,040	130,443	67,409	55,373
2002	1,628,842	639,704	427,399	189,920	141,319	72,768	58,676
2003	1,690,471	661,203	437,792	193,245	142,369	74,486	59,795
2004	1,909,487	725,481	486,504	206,998	151,190	81,909	61,990
2005	2,168,816	818,509	540,215	222,354	160,152	82,429	60,734
2006	2,322,365	891,250	590,704	245,067	177,326	92,969	69,031
2007	2,689,905	1,017,467	667,979	267,359	188,908	95,588	71,027
2008	2,586,567	992,522	655,960	264,198	186,925	94,766	70,471
2009	2,516,952	967,646	642,455	260,802	184,281	93,091	69,270
2010	2,730,837	1,047,121	693,848	277,615	195,529	97,134	71,929

Note: Statistics are for all Korea(North and South combined) before liberation and for South Korea after liberation.

Unit: Thousand won at constant 2010 prices

Table A4. Top Income Shares in Korea

	top 0.01%	top 0.05%	top 0.1%	top 0.5%	top 1%	top 5%	top 10%
1933	2.82	6.16	8.37	16.09	21.13		
1934	2.81	6.17	8.35	15.63	20.14		
1935	2.54	5.59	7.58	14.33	18.44		
1936	2.48	5.43	7.37	13.96	18.00		
1937	2.34	5.30	7.11	13.12	16.77		
1938	3.00	5.93	7.75	13.94	17.80		
1939	2.90	5.70	7.55	13.47	17.21	29.98	
1940	2.85	5.62	7.42	13.38	17.02	29.55	
1979	0.86	1.56	2.06	4.79	7.17	18.66	27.03
1980	0.72	1.43	1.99	4.95	7.47	19.78	28.80
1981	0.60	1.30	1.89	4.71	7.14	19.29	28.63
1982	0.53	1.20	1.78	4.73	7.27	20.05	29.66
1983	0.47	1.17	1.78	4.84	7.46	20.49	30.18
1984	0.55	1.23	1.80	4.76	7.35	19.79	29.19
1985	0.64	1.33	1.91	4.75	7.16	19.40	28.84
1995	0.67	1.40	1.96	4.57	6.88	19.18	29.20
1996	0.72	1.50	2.10	4.87	7.27	19.36	32.64
1997	0.73	1.52	2.14	4.96	7.49	19.80	33.37
1998	0.56	1.23	1.76	4.30	6.58	18.44	31.43
1999	0.72	1.49	2.10	4.97	7.55	19.90	33.45
2000	0.85	1.70	2.37	5.42	8.26	21.47	35.77
2001	0.96	1.91	2.60	5.69	8.63	22.30	36.64
2002	1.07	2.09	2.80	6.22	9.25	23.82	38.42
2003	1.11	2.16	2.87	6.32	9.32	24.38	39.14
2004	1.23	2.34	3.14	6.67	9.74	26.40	39.96
2005	1.36	2.57	3.40	6.99	10.07	25.91	38.18
2006	1.43	2.74	3.63	7.53	10.90	28.57	42.43
2007	1.62	3.07	4.03	8.07	11.41	28.86	42.88
2008	1.59	3.05	4.04	8.13	11.51	29.17	43.38
2009	1.57	3.01	4.00	8.12	11.47	28.98	43.13
2010	1.67	3.20	4.24	8.47	11.93	29.64	43.90

Note: 1) Statistics are for all Korea(North and South combined) before liberation and for South Korea after liberation.

2) The income shares of the top 0.5-0.1% are the difference between the top 0.5% and 0.1% income shares.

Unit: %

Table A5. Top Income Composition

	top 1%						top 0.05%			
	Wage Income	Business Income	Rents	Interest	Dividends		Wage Income	Business Income and Rents	Interest	Dividends
1933	30.1	35.1	30.7	1.7	2.4	2007	39.5	28.4	7.6	24.5
1934	26.8	35.8	33.5	1.7	2.3	2008	40.1	29.3	7.2	23.4
1935	25.6	36.9	33.6	1.6	2.4	2009	39.5	32.0	7.2	21.3
1936	26.9	39.4	28.5	1.4	3.8	2010	38.7	31.2	5.1	25.0
1937	24.9	39.1	30.5	1.3	4.2		top 0.1%			
1938	24.8	40.4	28.9	1.2	4.7	2007	42.5	30.6	6.9	19.9
1939	26.5	45.8	21.3	1.1	5.3	2008	41.7	32.2	6.6	19.5
1940	26.5	43.4	24.6	1.0	4.6	2009	41.1	34.4	6.7	17.8
1941	31.6	41.1	22.6	1.0	3.7	2010	40.9	33.5	4.7	20.9
1942	36.8	42.1	16.2	1.0	3.9					
	Business Income and Rents						top 10%			
2007	62.7	25.2		3.9	8.2	2007	83.1	12.8	1.5	2.7
2008	61.3	27.3		3.6	7.8	2008	83.5	13.0	1.2	2.3
2009	60.3	28.9		3.7	7.2	2009	82.9	13.7	1.3	2.1
2010	58.0	30.0		2.8	9.3	2010	82.6	14.0	0.9	2.5

Note: 1) The figures before liberation are not exactly the income shares of the top 1%. They are income shares of different top income groups from the top 1.4% in 1933 to the top 4.8% in 1942.

2) A portion of interest is excluded in the estimation before liberation and taxpayers with financial income below 40 million won are excluded after liberation.

3) The top income composition for 1943-2006 cannot be estimated due to data limitations.

4) Statistics are for all Korea(North and South combined) before liberation and for South Korea after liberation.

Unit: %

Table B1. Number of Employment and Wage Income

| | Number of Employment (thousands) | Earners of Wage Income(thousands) | | | Ratio(%) | Wage Income (billion won) | Average Wage Income (thousand won) | CPI (2010=100) |
| | | Taxpayer | Workers Below Exemption Point | Daily workers | | | | |
	A	B			B/A	C	C/A	D
1963	2,383	653				6,335	2,659	2.1
1964	2,363	797				6,485	2,744	2.7
1965	2,609	965				7,122	2,730	3.0
1966	2,780	1,142				8,452	3,040	3.4
1967	3,040	1,517				10,329	3,398	3.7
1968	3,400	1,735				12,038	3,541	4.1
1969	3,547	2,650				14,406	4,061	4.6
1970	3,746	2,868				15,725	4,198	5.4
1971	3,923	4,026				17,111	4,362	6.1
1972	4,005	3,573				18,626	4,651	6.8
1973	4,153	2,616				21,947	5,285	7.0
1974	4,444	2,778				24,281	5,464	8.8
1975	4,751	1,226			25.8	26,805	5,642	11.0
1976	5,140	1,693			32.9	32,556	6,334	12.6
1977	5,714	1,732			30.3	39,537	6,919	13.9
1978	6,242	1,880			30.1	49,210	7,884	15.9
1979	6,479	2,435			37.6	55,738	8,603	18.9
1980	6,464	2,332			36.1	53,500	8,277	24.3
1981	6,605	3,086			46.7	54,499	8,251	29.5
1982	6,839	2,888			42.2	59,379	8,682	31.6
1983	7,170	3,239			45.2	69,530	9,697	32.6
1984	7,631	3,665			48.0	78,057	10,229	33.4
1985	8,104	4,042			49.9	84,551	10,433	34.2
1986	8,433					95,534	11,329	35.2
1987	9,191					110,444	12,016	36.2
1988	9,610					125,770	13,087	38.8
1989	10,390					141,075	13,578	41.0
1990	10,950					158,832	14,505	44.5
1991	11,699					179,787	15,368	48.7
1992	11,910					193,816	16,273	51.7
1993	11,944					209,359	17,528	54.2
1994	12,479					229,358	18,379	57.6
1995	12,899	7,198			55.8	265,286	20,566	60.2
1996	13,200	6,958			52.7	289,645	21,943	63.2
1997	13,404	6,944			51.8	292,255	21,804	66.0
1998	12,296	6,269			51.0	259,316	21,089	70.9
1999	12,663	5,520			43.6	270,860	21,390	71.5
2000	13,360	5,934			44.4	297,557	22,272	73.1
2001	13,659	6,447			47.2	310,938	22,764	76.1
2002	14,181	6,188			43.6	333,200	23,496	78.2
2003	14,402	6,258			43.4	350,132	24,311	80.9
2004	14,894	6,268			42.1	368,642	24,751	83.8
2005	15,185	6,107	5,796		40.2	380,356	25,048	86.1
2006	15,551	6,621	5,974		42.6	392,243	25,223	88.1
2007	15,970	7,749	5,628		48.5	406,945	25,482	90.3
2008	16,206	7,981	6,065	7,381	49.2	409,760	25,284	94.5
2009	16,454	8,541	5,754	7,559	51.9	415,049	25,225	97.1
2010	16,971	9,244	5,932	7,825	54.5	428,282	25,236	100.0

Note: 1) The number of taxpayers before 1972 is computed by dividing the sum of monthly tax units withheld at source by 12.

2) The number of taxpayers before 1974 includes those with wage income below the exemption point.

Table B2. Threshold Wage Income of Top Income Groups

	P99.99	P99.95	P99.9	P99.5	P99	P95	P90
1963	37,721	27,339	26,643	13,072	10,365	7,530	5,638
1964	29,202	21,589	16,522	11,820	9,981	5,741	4,743
1965	30,524	21,262	16,905	11,069	9,671	5,633	4,708
1966	31,984	21,169	19,308	11,171	9,618	6,649	5,187
1967	42,673	26,582	21,873	11,475	8,564	7,172	6,119
1968	54,303	23,602	23,543	15,416	12,610	8,230	7,324
1969	53,520	30,953	22,783	16,667	14,346	9,380	8,214
1970	55,936	35,415	27,849	19,191	15,795	9,115	6,952
1971	42,934	30,725	31,128	19,044	15,479	9,417	7,195
1972	46,307	28,582	28,884	18,022	14,552	9,523	7,726
1973	72,502	42,400	33,653	19,840	16,715	9,954	7,895
1974	89,806	52,519	41,684	21,728	18,002	11,439	8,536
1975	101,130	59,141	46,941	27,414	20,317	10,722	8,390
1976	94,015	54,980	43,638	25,520	20,957	11,916	8,999
1977	103,857	61,311	48,734	31,489	25,967	13,153	9,643
1978	139,858	81,789	64,916	40,130	31,578	18,950	13,741
1979	140,040	51,358	70,444	42,750	33,566	19,507	14,077
1980	112,666	65,453	51,802	37,722	30,617	18,569	14,209
1981	103,481	72,027	55,962	36,213	29,887	17,966	13,587
1982	107,680	77,305	63,450	39,927	32,000	19,890	15,314
1983	128,567	83,466	70,094	42,750	34,569	20,866	16,704
1984	129,055	81,958	70,719	43,923	35,058	21,840	17,066
1985	156,401	96,965	70,974	46,333	36,662	22,996	17,549
1995	423,720	170,410	117,344	83,877	66,166	47,014	39,418
1996	316,124	169,153	128,275	93,517	77,552	50,213	47,372
1997	270,530	164,916	132,888	97,226	83,288	58,150	48,986
1998	357,529	171,846	125,984	90,446	73,569	45,543	45,948
1999	420,592	223,576	172,356	104,507	83,972	50,526	49,823
2000	466,582	244,968	185,445	100,075	92,747	56,898	52,456
2001	484,007	230,437	178,611	91,342	92,907	57,965	52,440
2002	517,274	251,961	198,779	106,372	101,703	64,007	56,227
2003	496,453	249,161	197,987	108,873	102,701	66,590	56,732
2004	576,654	275,907	209,691	126,018	99,478	69,401	57,780
2005	696,220	306,165	214,859	121,463	103,150	68,380	57,542
2006	773,525	339,656	242,554	145,150	121,575	79,157	64,459
2007	899,780	359,269	252,737	141,794	116,432	71,570	59,710
2008	869,648	370,122	264,132	115,942	115,522	71,319	58,833
2009	806,972	361,377	252,355	115,935	112,152	69,605	57,515
2010	869,824	384,761	271,865	128,797	120,464	73,118	57,606

Note: P99.99 denotes the threshold income of the top 0.01% income group.
Unit: Thousand won at constant 2010 prices

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Table B.3. Average Wage Income of Top Income Groups

	top 0.01%	top 0.05%	top 0.1%	top 0.5%	top 1%	top 5%	top 10%
1963	73,115	38,665	31,496	19,651	15,581	10,173	8,236
1964	38,095	26,826	22,196	14,992	12,788	7,950	6,531
1965	39,306	27,023	23,146	14,842	12,587	8,038	6,576
1966	80,445	38,569	30,083	17,560	14,031	9,253	7,505
1967	90,282	43,635	33,894	19,861	14,822	8,627	7,685
1968	115,965	53,359	41,186	22,757	18,381	11,291	9,557
1969	119,931	55,484	40,839	24,716	20,034	12,740	10,747
1970	99,151	54,210	42,629	26,079	21,583	13,486	10,213
1971	138,629	60,980	47,425	27,169	22,083	13,540	10,773
1972	119,650	55,049	43,952	26,496	21,605	13,637	11,064
1973	108,754	63,600	50,479	29,987	24,027	14,605	11,655
1974	134,709	78,778	62,526	38,359	29,537	16,731	13,326
1975	151,696	88,712	70,411	48,283	35,784	18,127	13,753
1976	141,022	82,470	65,457	38,279	36,303	19,117	14,642
1977	155,786	91,675	72,870	44,609	36,532	21,206	16,106
1978	209,787	122,684	97,374	59,393	47,236	27,967	21,677
1979	371,725	136,325	105,503	61,726	48,325	29,076	23,059
1980	170,049	98,789	78,186	53,970	43,805	26,832	21,404
1981	203,417	113,269	88,005	55,525	43,901	26,487	21,131
1982	200,786	108,110	88,734	58,658	47,011	28,721	23,097
1983	171,859	111,572	93,696	61,640	49,844	30,420	24,675
1984	182,155	104,112	89,835	65,095	51,956	31,474	25,213
1985	390,953	176,360	129,086	69,963	55,360	33,214	26,445
1995	949,131	383,894	261,307	127,511	100,586	63,040	52,855
1996	535,486	281,496	213,469	128,118	106,245	68,792	56,087
1997	400,762	239,535	193,016	125,168	107,224	74,862	57,834
1998	700,867	325,720	235,516	128,835	104,794	64,873	54,386
1999	728,820	371,305	281,394	152,706	122,699	73,829	59,112
2000	813,099	409,373	309,902	164,382	133,179	81,702	62,889
2001	898,146	427,611	316,524	158,959	131,432	82,001	63,758
2002	935,270	455,564	337,449	176,505	142,785	89,862	69,053
2003	868,443	435,856	325,778	175,332	140,533	91,120	69,939
2004	1,019,289	506,795	358,958	191,278	150,994	94,346	78,547
2005	1,416,708	626,003	439,313	209,618	162,488	97,910	80,360
2006	1,531,785	680,066	476,942	226,153	173,557	106,892	85,462
2007	2,010,649	820,551	557,274	247,962	186,166	106,615	86,275
2008	1,789,626	778,509	540,790	237,382	184,466	106,068	85,786
2009	1,731,113	749,829	523,615	232,904	180,176	103,418	83,713
2010	1,723,153	771,841	544,354	249,109	187,951	108,342	86,264

Unit: Thousand won at constant 2010 prices

Table B4. Top Wage Income Shares in Korea

|	top 0.01%	top 0.05%	top 0.1%	top 0.5%	top 1%	top 5%	top 10%
1963	0.28	0.73	1.18	3.70	5.86	19.13	30.98
1964	0.14	0.49	0.81	2.73	4.66	14.48	23.80
1965	0.14	0.49	0.85	2.72	4.61	14.72	24.09
1966	0.26	0.63	0.99	2.89	4.62	15.22	24.69
1967	0.27	0.64	1.00	2.92	4.36	12.70	22.62
1968	0.33	0.75	1.16	3.21	5.19	15.94	26.99
1969	0.30	0.68	1.01	3.04	4.93	15.68	26.46
1970	0.24	0.65	1.02	3.11	5.14	16.06	24.33
1971	0.32	0.70	1.09	3.11	5.06	15.52	24.70
1972	0.26	0.59	0.95	2.85	4.65	14.66	23.79
1973	0.21	0.60	0.96	2.84	4.55	13.82	22.05
1974	0.25	0.72	1.14	3.51	5.41	15.31	24.39
1975	0.27	0.79	1.25	4.28	6.34	16.06	24.38
1976	0.22	0.65	1.03	3.02	5.73	15.09	23.12
1977	0.23	0.66	1.05	3.22	5.28	15.32	23.28
1978	0.27	0.78	1.24	3.77	5.99	17.74	27.50
1979	0.43	0.79	1.23	3.59	5.62	16.90	26.80
1980	0.21	0.60	0.94	3.26	5.29	16.21	25.86
1981	0.25	0.69	1.07	3.36	5.32	16.05	25.61
1982	0.23	0.62	1.02	3.38	5.41	16.54	26.60
1983	0.18	0.58	0.97	3.18	5.14	15.68	25.45
1984	0.18	0.51	0.88	3.18	5.08	15.38	24.65
1985	0.37	0.85	1.24	3.35	5.31	15.92	25.35
1995	0.46	0.93	1.27	3.10	4.89	15.33	25.70
1996	0.24	0.64	0.97	2.92	4.84	15.68	25.56
1997	0.18	0.55	0.89	2.87	4.92	17.17	26.52
1998	0.33	0.77	1.12	3.05	4.97	15.38	25.79
1999	0.34	0.87	1.32	3.57	5.74	17.26	27.64
2000	0.37	0.92	1.39	3.69	5.98	18.34	28.24
2001	0.39	0.94	1.39	3.49	5.77	18.01	28.01
2002	0.40	0.97	1.44	3.76	6.08	19.12	29.39
2003	0.36	0.90	1.34	3.61	5.78	18.74	28.77
2004	0.41	1.02	1.45	3.86	6.10	19.06	31.73
2005	0.57	1.25	1.75	4.18	6.49	19.54	32.08
2006	0.61	1.35	1.89	4.48	6.88	21.19	33.88
2007	0.79	1.61	2.19	4.87	7.31	20.92	33.86
2008	0.71	1.54	2.14	4.69	7.30	20.97	33.93
2009	0.69	1.49	2.08	4.62	7.14	20.50	33.19
2010	0.68	1.53	2.16	4.94	7.45	21.47	34.18

Note: The income shares of the top 0.5-0.1% are the difference between the top 0.5% and 0.1% income shares.
Unit: %

Table B5. Marginal Tax Rates of Top Wage Income in Korea

	Top MTR	0.01%	0.1%	1%	5%	10%
1933	13.5	3.3	1.3	0.2		
1934	27.0	8.0	2.5	0.4		
1935	27.0	8.0	3.5	0.6		
1936	27.0	8.0	3.5	0.6		
1937	34.0	10.0	4.0	1.3		
1938	34.0	12.0	5.5	1.3		
1939	57.0	16.0	8.0	2.0	0.3	
1940	57.0	16.0	10.0	2.0	0.3	
1963	35.0	35.0	25.0	7.0	7.0	7.0
1964	35.0	35.0	15.0	15.0	7.0	7.0
1965	35.0	35.0	25.0	15.0	7.0	7.0
1966	35.0	35.0	25.0	15.0	7.0	7.0
1967	44.0	44.0	38.5	16.5	16.5	7.7
1968	55.0	55.0	55.0	22.0	13.2	13.2
1969	55.0	55.0	55.0	29.7	16.5	16.5
1970	55.0	55.0	37.4	15.4	12.1	9.9
1971	55.0	46.2	37.4	15.4	12.1	9.9
1972	48.0	48.0	32.0	15.0	12.0	9.0
1973	48.0	48.0	40.0	19.0	12.0	9.0
1974	48.0	48.0	48.0	32.0	19.0	15.0
1975	70.0	50.0	40.0	25.0	12.0	10.0
1976	70.0	50.0	40.0	30.0	15.0	10.0
1977	70.0	55.0	45.0	35.0	15.0	10.0
1978	70.0	55.0	45.0	35.0	18.0	12.0
1979	70.0	55.0	45.0	30.0	15.0	12.0
1980	70.0	55.0	45.0	30.0	18.0	15.0
1981	62.0	48.0	40.0	28.0	18.0	10.0
1982	62.0	48.0	40.0	28.0	15.0	10.0
1983	60.0	50.0	38.0	22.0	15.0	10.0
1984	55.0	47.0	35.0	21.0	12.0	10.0
1985	55.0	51.0	35.0	21.0	15.0	10.0
1995	45.0	45.0	36.0	27.0	27.0	18.0
1996	40.0	40.0	30.0	20.0	20.0	20.0
1997	40.0	40.0	30.0	30.0	20.0	20.0
1998	40.0	40.0	30.0	30.0	20.0	20.0
1999	40.0	40.0	40.0	30.0	20.0	20.0
2000	40.0	40.0	40.0	30.0	20.0	20.0
2001	40.0	40.0	40.0	30.0	20.0	20.0
2002	36.0	36.0	36.0	27.0	18.0	18.0
2003	36.0	36.0	36.0	27.0	18.0	18.0
2004	36.0	36.0	36.0	27.0	27.0	18.0
2005	36.0	36.0	36.0	27.0	27.0	18.0
2006	36.0	36.0	36.0	36.0	27.0	18.0
2007	36.0	36.0	36.0	36.0	27.0	18.0
2008	35.0	35.0	35.0	35.0	26.0	17.0
2009	35.0	35.0	35.0	35.0	24.0	15.0
2010	35.0	35.0	35.0	35.0	24.0	15.0

Unit: %

FIG. A1. Income Shares of Top Fractiles in Korea, 1933-2010

(A) Top 1% and Next 4% Income Shares

(B) Decomposition of Top 1% Income Share
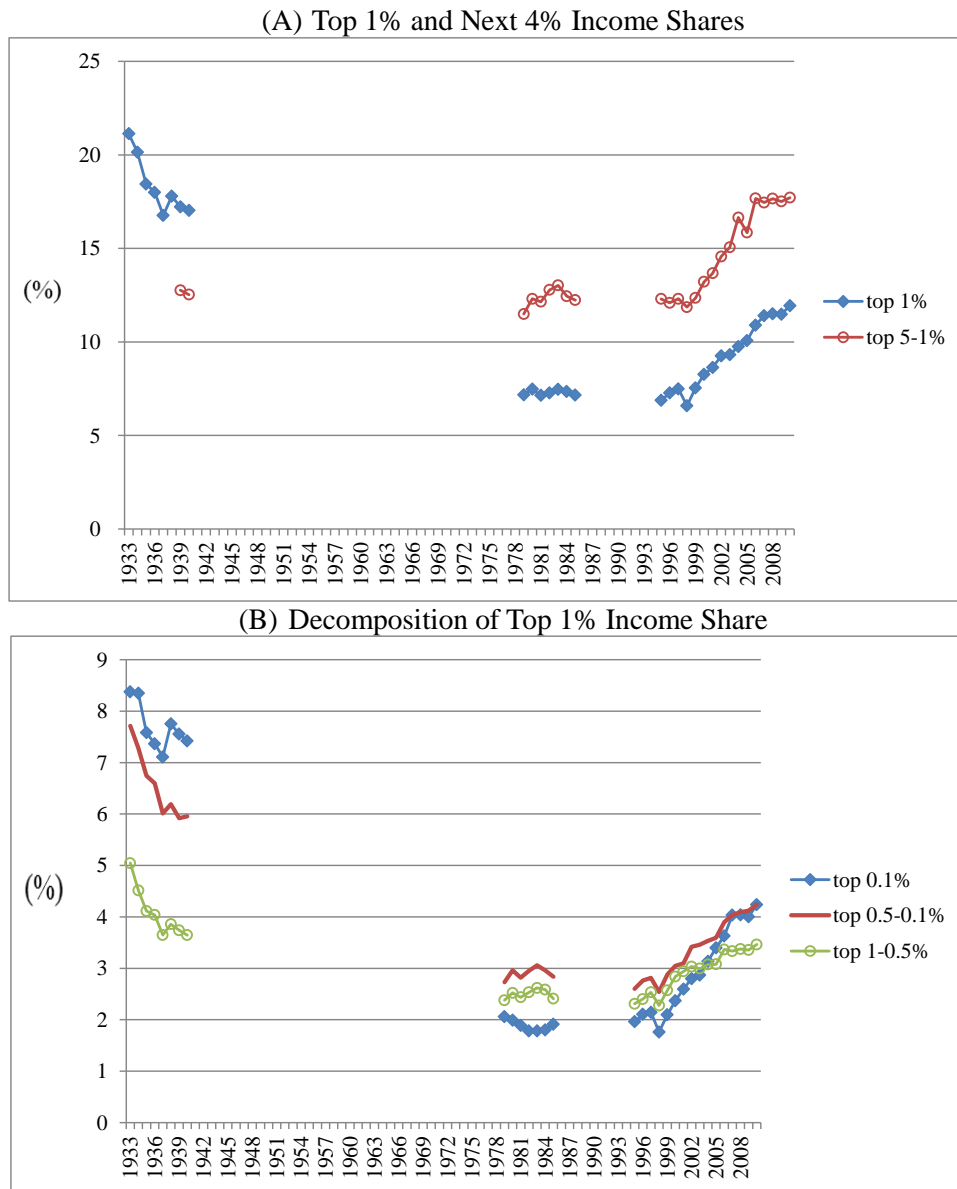
Source: Table A4 in Appendix.

Note: 1) Top income shares are for all Korea(North and South combined) before liberation and for South Korea after liberation.

2) The top 5-1% denotes the income share of the top 5% excluding the top 1 %. The top 0.5-01% denotes the income share of the top 0.5% excluding the top 0.1 %. The top 1-0.5% denotes the income share of the top 1% excluding the top 0.5 %.