A Study on the Relation Between Welfare Level and Tax Structure*  

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Abstract

This paper investigates the relation between welfare level and tax structure. Key conclusions are as follows. First, high welfare accompanies high burden. High welfare states (Northern European and continental-type states) have tax burden ratio and ratio of social security burden that are above the average. Southern European states pursued to becoming high-welfare states without building up the financing structure that can bear high burden as in advanced welfare states. This was one of the important causes of financial crisis in these states. Second, there exist such financing structures that correspond to high welfare and high burden, and low welfare and low burden in accordance with the typology of welfare states, except for changes resulting from short-term fluctuations.

Keywords: welfare level, tax structure, welfare state types  
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1. Introduction

The author’s research question comes from the Korean welfare situation. Korea is expecting that the social welfare expenditure will grow very quickly. But there is no clear consensus about how to finance the rapid expanding social welfare expenditure.

The author’s research question is as follows: Are there financing structures and social expenditure structures that correspond to high welfare expenditure or low welfare expenditure? If there are such structures, then what they look like? And are the financing structures connected with the welfare state types? In the course that the answers to these questions are searched the author is expecting to find some regularities about social welfare financing structures.

The most popular welfare state typology is that of Esping-Anderson(1990). In this paper four types of welfare states, which are developed based on Esping-Anderson(1990), are used: social-democratic/Northern-European/Scandinavian welfare states, conservative/corporatist/ European continental welfare states, liberal/Anglo-American welfare states, Southern European welfare states (Dieckhoener and Peichl, 2009, 2-16).

The two important criteria of this typology are the conditions of entitlement to benefits and the financing structure of social spending (Dieckhoener and Peichl, 2009, 7). These can be roughly represented by the level of the social expenditure(see OECD SOCX data) and the national burden. The national burden ratio is composed of tax burden ratio(tax/GDP) and social contribution ratio(social contribution/GDP). Bonoli(1997) used these two criteria to classify welfare states. It focused on welfare financing structure of welfare states and classified states into groups in accordance with the level of social security expenditure (the share of social expenditure in GDP) and importance of social contributions in the combination of financial resources (the share of social contributions in social expenditure). In other words, classification of Bonoli considers the level of welfare provided on one hand and financing structure in the welfare system on the other.

The four groups of welfare states according to Bonoli’s typology can be divided as follows. First is the group of social democratic states in Northern Europe, characterized by high-level welfare provided through social expenditure and low proportion of social expenditure to GDP made possible by social contributions; second is the group of conservative states in the European Continent characterized by high proportion of social contributions to social expenditure and high proportion of social expenditure to GDP; third is the group of liberalist states characterized by both low-level social contributions and low-level social expenditure; and last is the group of Southern European states characterized by high-level social contributions accompanied by low-level social expenditure, which is due to their underdeveloped conditions.
In regard to the relationship between social welfare level and tax structure, this paper focused following points. For this Kato (2003) was helpful, and the contents of the literature that are related to this research are summarized as follows:

Kato (2003, 34) argued that existing industrially advanced countries, in a general tendency, have transferred main source of tax revenue from such simple indirect taxes as tariff to income taxes, and then to general consumption taxes including value-added tax (Kato, 2003, 34). In other words, in the initial period after the World War II, there was worldwide adoption and spread of progressive taxation simultaneously, based on the trend of academic circle that comprehensive income tax was ideal. Afterwards, in the 1980s, the worldwide trend in tax reform was in opposition to the trend after the World War II. In those days, income tax failed to respond to inflation, had become complex and its taxation base was impaired due to reductions, etc., and was susceptible to worldwide depression and stagflation since the mid-1970s. Under the circumstances, universal trends in this period were first to expand taxation base by simplifying income tax, through the reduction of the number of income brackets and abolition of reduction etc. Second, to lower rate of corporate tax in the recognition that high corporate tax rate, which seemed to bring about capital outflow in the process of globalization, was an obstacle to economy and securing revenue, and thus increase in related taxation base. Finally, to depend more on regressive taxes in the process of recouping decrease in tax revenue, which results from decrease in income tax and corporate tax. Consumption tax and social security contributions that are levied on a fixed rate are representative regressive taxes.

Even in such transition, however, looking into individual states shows that the characteristics of each state, including the differences in total tax level, namely between high-tax state and low-tax state, in the method of distributing tax burden among capital, labor, consumption, and particularly in the characteristics in depending on consumption, remained unchanged (Steinmo and Swank, 1999, 23; Messere, 1998; requoted from Kato, 2003, 17). In other words, high-tax states, while maintaining total tax revenue in high level and the existing level of direct taxes on income and profit at the same time, pursued additional revenue from regressive taxes. This
resulted in becoming more dependent on such regressive taxes that are levied on a fixed rate as consumption tax and social security contributions. In this aspect, mature welfare states are also dependent on regressive taxes in addition to progressive taxes, which is the method that is regarded as the most desirable for welfare financing. And the most representative of such state is Sweden (Kato, 2003, 19). In contrast, low-tax states maintained low level of total tax revenue, and were less dependent on consumption tax in the composition of tax revenue.

Thus, in terms of overall average level, common aspects are observed but structural differences of individual states are also maintained. To explain these opposite phenomena observed on the surface, there is an assumption that a certain change happened that caused this structural differences between the initial period after the World War II, when common trends dominated worldwide, and the 1980s, for an instance, between 1965 and 1980 (Kato, 2003, 13-14).

Actualization of the assumption is as follows (Kato, 2003, 24): welfare states, which institutionalized the capacity for boosting revenue early enough could expand or maintain social expenditure to resist financial crises which happened since 1980s. In the same context, such states that are late with such institutionalization will be inclined to reduction of welfare and social expenditure in the advent of financial crisis. 'Early' here shall be regarded as the period of time before the high growth after the World War II ended due to worldwide economic recession caused by oil shock in the early 1970s, and 'late' as the period of time since the mid 1980s when regression of welfare state regimes were anticipated in all advanced industrial states.

It is also argued that value-added tax (VAT) should be used as a reference point regarding the time of structural change in taxation (Kato, 2003, 24-28). This is because value-added tax had not been widely known before several European nations simultaneously introduced it in the late 1960s, and structural changes in each country, which increased significantly since then, can be well explained. This is based on the fact that enforcement of value-added tax, a regressive tax levied in a fixed rate on a broad taxation base, has a strong power of boosting revenue.

With this transition to dependence on regressive taxes for revenue as a standard, advanced industrial states are divided into two groups. As mentioned above, this is based on the fact that the time of introduction of value-added tax serves as a good criterion in comparing tax structure between nations except for few exceptions (Kato, 2003, 28).

One group consists of nations that show a typical transition in the source of revenue by introducing value-added tax long before governments went through chronic budget deficit, to which group most West European nations belong. These nations, even before introduction of value-added tax was a compulsory requirement for joining the EU, had general consumption tax in any shape or form. Besides, a conventional argument holds that these nations have strong labor union, and as a result, have high welfare expenditure. However, only Denmark and the Netherlands satisfy those three conditions (Kato, 2003, 30).

The other group consists of countries that attempted the transition of revenue source through introduction of value-added tax only after experiencing budget deficit. They introduced value-
added tax after the mid-1980s when they were already suffering from chronic budget deficit. Here belong non-European countries of New Zealand, Japan, Canada and Australia, of which the public sector expenditure and social expenditure are not high (Kato, 2003, 32).

There is an additional group which consists of those countries that are newly entering the category of advanced industrial states. As late starters, they knew, from the experience of advanced industrial states, the existence of various methods of raising revenue and the possibility of rapid expansion of public sector. Therefore, they could introduce value-added tax comparatively earlier than existing advanced industrial countries. In this sense, they are considered to be on a different course in the aspect of development to modern tax system and institutionalization of social security system. Korea, Taiwan, etc. belong to this group (Kato, 2003, 34).

Kato (2003, 42-51) conducted two-stage analysis on random effect model using OECD data of 1965-1992. Dependent variable of the first stage was the share of social expenditure in GDP and that of second stage is the share of general consumption tax in GDP. The most important variable of this research is the relationship between social expenditure, the dependent variable of the first stage, and the general consumption tax of the second stage, which is the independent variable of the second stage. The result was that what had positive correlation in all related models of about 67% explanatory power was significant on 1% of significance level.

Based on the result, conclusions were reached as follows (Kato, 2003, 51-52):

First, nations with bigger public sector and social expenditure will try to earn revenue needed to be raised correspondingly more from all kinds of taxes, particularly from general consumption tax, a kind of regressive tax.

Second, the process in which increasing regressive taxes result in the increase in social expenditure can be inferred as follows: at first, increase in regressive taxes means easy increase of revenue, and this encourages public sector to grow bigger, and such bigger public sector results in improvement in income distribution through redistribution in existing welfare states. Accordingly, since members of society in such nations come to experience the effects of income redistribution, improvement in government’s ability to secure fiscal resources constitutes a political condition that can resist the welfare reduction trend that has been prevalent in welfare states since the 1980s. Thus it is revealed that the timepoint when regressive tax system is introduced after such financial and political interpretations can be a very important factor for remaining as a welfare state and particularly for resistance against welfare reduction. To put it more specifically, it can be inferred that those countries that introduced regressive taxes before the economy ceased high growth and came under chronic budget deficit had the chance to spend the revenue from regressive taxes on social expenditure and people who received the benefit from this would approve of such tax collection; while in those countries that introduced regressive taxes later to compensate for budget deficit, people had no chance to benefit from social expenditure, and naturally have more rejection to tax increase. Now those times when simple increase in tax
progressivity without consideration of benefit was praised are passing.

Lindert (2004) studied the relationship between social expenditure and economic growth since the 18th century in historical perspective. He discussed tax as welfare finance in the part where the example of Sweden (pp.264-295) was presented and in the last part that amounts to conclusion (296-308). Particularly, in the part that presents Sweden as an example, he discussed social expenditure that contributes to economic growth.

Yoon Hong-shik (2011), for the purpose of finding out whether there exists such a tax structure that is friendly to universal welfare states, drew questions from the above mentioned literature of Kato (2003), Lindert (2004), etc. and showed, in the process of answering them, that there exist universal tax states corresponding to universal welfare states.

2. Data and Methodology

<Source of data>

As for taxation data for comprehensive research of 19 OECD member states, OECD Revenue Statistics (2010): Special feature: Environmental Related Taxation (2010), and OECD Tax Database (2011) on the website www.oecd.org/ctp/taxdatabase were used. According to OECD Revenue Statistics (2010) taxes are classified as follows: income tax (personal income tax, corporate income tax), social security contributions (employee, employer), payroll tax, property tax, goods and service tax (general consumption tax, special consumption tax), and other taxes. The data time span is from 1965 to 2008.

Social expenditure data in OECD SOCX Data was also used.

<Research questions and analysis method>

Based on the study of the literature of preceding researches, following questions can be raised as to how Korea should secure financial resources to meet increasing demands for welfare in the future.

At first, 19 nations to be analyzed for consideration of the questions will be examined after classifying them by type of welfare regime into social democracy in Northern Europe (Sweden, Finland, Norway, Denmark), conservatist in the European Continent (German, France, Belgium, Austria, the Netherlands), Anglo-American liberalist (Britain, America, Canada, Australia), Southern European (Spain, Italy, Portugal, Greece), and Japan and Korea. At the same time, diachronic observation on each item will be made by every five years from 1965 to 2008, so that influences of the oil shock in the early 1970s, welfare reduction resulted from budget deficit in the 1980s, and globalization which began in the 1990s can be considered as well.

The common analysis method to find regularities in this paper is to compare with mean values.
The specific questions to be dealt with and the method of analysis applied in this research are as follows:

1) It is necessary to confirm by questioning the obvious fact whether those countries with high social expenditure level have high national burden which includes tax and social security contributions. The criteria for high and low are the average values of the 19 OECD countries. If social expenditure level and national burden is higher than the average, then they are high.

2) Whether high burden and high welfare correspond with each other will be examined based on Bonoli (1997)'s classification which divides states focused on the importance of social security contributions.

3) A search will be made whether there is a structure of spending that can sustain high national burden. This is because such trends were observed in existing researches that, with the increase in revenue, spendings related to family sector increase in all types of welfare states, those on unemployment and active labor market policies in high-burden states (Northern European type and European continental type), while they decrease in low-burden states (British-American type). This was interpreted that job-related labor market policies are important for high-burden type states, and family-related spendings that also cover measures against such new social risks as working mothers, etc. should be increased as well. (Ryu et al, 2008, 160-164) Lindert(2004, 281-290) argued that in the case of investing in jobs for women and child care, such social spendings that are spent on education and retraining, and delaying retirement contribute to economic growth.

4) An observation will be made on the changes in the proportion to GDP of indirect tax vs. direct tax, progressive tax vs. regressive tax, and corporate tax vs. non-corporate tax in high-welfare states.
   a. Entire tax structure will be classified into the income tax (personal income tax, corporate income tax), social security contributions (employee, employer), payroll tax, property tax, goods and services tax (general consumption tax, special consumption tax), and other taxes to be suggested for 19 countries classified by welfare state regime for the purpose of providing information for other discussions.
   b. By observing the changes in the proportion of indirect tax and direct tax in high-welfare states, a tax structure that corresponds to increasing welfare demands will be imagined. According to the earlier discussion, this is the direction in which use of all taxes, including general consumption tax, an indirect tax, should be oriented.
   c. By observing the changes in the proportion of progressive tax and regressive tax in high-welfare states, a tax structure that corresponds to increasing welfare demands will be imagined. According to the earlier discussion, this is the direction in which use of all taxes, including general consumption tax, a regressive tax, and social security contributions, should be oriented.
   d. There is an argument that trend goes in the direction of reducing corporate tax for the
reason of bad influence on economy and tax revenue due to capital outflow in relation to globalization. To confirm if the argument is right, changes in the proportion of corporate tax and non-corporate tax will be observed.

3. Results

1) Trends in the tax burden-, social security contribution-, national burden ratio and social expenditure in major OECD countries: Is high welfare expenditure accompanied by high ratio of national burden?

To make this analysis, following assumptions are made. The purpose of this analysis is to prove that where social expenditure is high, national burden is also high.

— The factors that can disable the correspondence between high welfare and high national burden are budget deficit and welfare expenditure made through redistribution of existing expenditure. Since these two cases do not last for long and their size is not big as well, a conclusion is reached that high welfare and high national burden correspond with each other.

— Social democratic states and conservative states, of which the welfare level is higher than the average of 19 states, will show higher ratio of national burden.

— In terms of composition of national burden, social democratic states, compared to conservative states, will show higher tax burden ratio than the ratio of social security contributions, and vice versa in the case of conservative states.

— Since Southern European states can be interpreted to be in the transition to conservative states in terms of welfare except for the specificity related to the role of family, welfare level there will get higher, but burden level can show unstable condition due to other factors including political reasons, etc. Showing the tendency of conservative states, the proportion to social expenditure of social security contributions in Southern European states will be comparatively high.

— British-American liberalist states, and Japan and Korea will show low welfare tendency, lower than the average of 19 countries; and the same will be true with national burden.

To confirm the above mentioned assumptions, the 19 OECD states, the subjects of the research, were examined for the years of 1965, 1980, 1995 and 2007 [chart 2-5] and the results are as follows:

Overall consideration of the discussions described thus far shows that all Northern European-type and continental-type states, which are high-welfare states, display high burden. Unlike 1965, since 1980s Northern European type shows high level also in social security burden with the ratio higher than the average, though a little lower than that of continental type. Instead, continental type is lower on average in tax burden, another part of national burden ratio. This means both tax ratio and the ratio of social security burden are above the average in universalistic welfare states that pursue high welfare; and in Northern European states, which are a little more universalistic,
tax burden is comparatively higher, while in continental-type states, which are social insurance-type states where security is focused on provision of good jobs, the ratio of social security burden is comparatively higher. Of the universalistic states, Denmark is the country that displays a distinctive characteristics: Though being a high-welfare state, it shows extremely high dependence on taxes with little dependence on social security burden (since 1995 according to the data of this research).

On the other hand, in the states that belong to British-American type, which is a low-welfare and low-burden type, both the national burden ratio and ratio of social security burden are lower than the average with the exception of Britain’s unusually high national burden ratio in the past. Usually, states that belong to British-American type have both tax burden and social security burden, but Australia shows a unique condition that is heavily dependent on taxes with little burden of social security.

In the case of Southern European type, which is classified as similar type to continental type, social security expenditure in the region grows bigger as time approaches nearer to recent times, showing the trend that states in the region are turning into high-welfare states, and correspondingly, the ratio of social security burden is also on a rising trend. On the other hand, in terms of the ratio of total national burden including tax burden, Italy is on high level and Spain is near the average in 2007. They are those Southern European-type states that are having trouble these days. A simple comparison between welfare level and burden level of them, without regard to their inefficient system, suggests that the reason for the trouble they have since 2008 can be found in that they failed to form a firm high-burden structure as those of advanced welfare states while moving into the direction of high welfare,

In the case of Japan, similarly to Korea, all of its social security expenditure, national burden ratio and ratio of social security burden remain under the average, with the recent exception of the ratio of social security burden surpassing the average; accordingly, it can be said this country belongs to low-welfare and low-burden type. However, considering its comparatively high ratio of social security burden, the nation can be regarded to be under-developed form of continental type, similarly to Southern European-type states.

Korea is similar to Japan, but falls far short of Japan in all dimensions, and also can be regarded to be under-developed form of continental type, similarly to Southern European type.

In case welfare demands increase and revenue needs to be financed in Korea, considering that its system is focused on social insurance, both tax and social security burden will have to be risen as in continental-type states; however, social security burden is expected to be comparatively higher than tax burden.

Data: Used OECD.stat and Revenue Statistics.

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Bonoli's typology watches the share of social security contributions in social expenditure on the horizontal axis, and the share of social expenditure in GDP on the axis of ordinates. If divided by the related average, high-welfare states are positioned above the average of the axis of ordinates and low-welfare states under it. In the same way, on the right side of the horizontal axis are positioned those states which are highly dependent on social security contributions for securing fiscal resources, in other words, Bismarckian states that are centered around social insurance; and on the left side, those states which are dependent on non-social security contributions, in other words, on taxes.

In 1980, Denmark, Sweden and Finland, which are high-welfare states and dependent on taxes, are positioned on the top left; Australia, Canada, Britain and the United States, which are low-welfare states dependent on taxes, are on the bottom left; Portugal, Japan, Greece and Spain, which are low-welfare states mainly dependent on social security contributions, are on the bottom right; and Italy, France, Germany, Belgium and the Netherlands, which are high-welfare states mainly dependent on social security contributions, are positioned on the top right. This is the typology of financing structure focused on social contributions and taxes, which corresponds with reality as well as with the existing typology that is focused on type of welfare regimes and welfare level. Only exception is Norway, which is out of usual expectation.

In 1990, this topology corresponds to the existing classification; and Norway, unlike in 1980, shows expected result. Only Greece has moved in the direction of Anglo-American type, unexpectedly. Looking at 2000 and 2007, it can also be said that there exist such financing structures that correspond to high welfare-high burden and low welfare-low burden in the typology of welfare states, except for temporary and partial changes resulting from short-term fluctuations.

This suggests when we consider adopting a financing structure to cope with increasing welfare demands, we cannot consider it excluding these structural options.

(On the following charts 6-9, 'ratio1' is 'social contribution as ratio of social expenditure' and 'ratio2' is 'social expenditure as ratio of GDP')
Chart 6: Classification of States According to Bonoli's classification – 1980

Chart 7: Classification of States According to Bonoli's classification – 1990
3) The social expenditure structure that can sustain high burden

Summing up the observations of charts 10-13 suggests that the result of existing research that of the investment made for job creation for women and child care, spendings on education and retraining, and delay of retirement were helpful for economic growth is supported by the observation that expenditure on family and active labor market policy has maintained a big share in social security expenditure in high-welfare and high-burden states. As for expenditure on unemployment policy, it can be said that if it is implemented together with flexibility of labor market and active labor market policy as part of golden triangle model of Denmark, it will have positive relationship with economic growth.
[Chart 12] Comparison of Composition of Social Security Expenditure – 2000
4) Tax composition of individual states and changes in the proportion of direct tax vs. indirect tax, progressive tax vs. regressive tax and corporate tax vs. non-corporate tax

(1) Tax composition of individual states

Summing up the observations of charts 14-17 is first, consumption tax shows biggest proportion in Northern European and continental-type states, which are high-welfare and high-burden states, in which the trend is general income tax is on the increase in comparison with special consumption tax. And though both personal income tax and social security contributions play a significant role in both types of states, personal income tax is prevalent in Northern
European-type states and social security contributions in continental-type states. In the case of Denmark, it is a unique Northern European-type state where the proportion of personal income tax is particularly big and the role of social security contributions is insignificant unlike the other Northern European states. As to corporate income tax, its proportion has not diminished and been stable near or little lower than the average recently, maintaining the importance level of its own in Northern European and continental-type states. Property tax also maintains its proportion; however, it is not an important tax item in Northern European-type states.

Second, personal income tax seems to be a significant source of tax revenue in Britain and American-type states, which are low-welfare and low-burden states, with the proportion being near the average or bigger than the average, though smaller than that of Northern European-type states. In terms of the proportion compared to other tax items, consumption tax and social security contributions are big (excluding Australia) but smaller than that of Northern European and continental type and smaller than the average of the 19 state. But the states that belong to British-American type show the proportion of property tax and corporate tax particularly bigger than the average compared to Northern European and continental-type states (excluding the United States in 2008).

Third, Southern European-type states are following continental-type states in their tendency that social security contributions are growing bigger than the average. However, considering that the proportion of consumption tax is also growing, these states are following both Northern European and continental type. Besides, in that corporate tax and property tax play comparatively significant role there, they also resemble British-American type. Personal income tax does not play an important role in these states.

Last, Korea and Japan are following continental-type states in the tendency that social security contributions are growing. The size of social security contributions of Japan has recently approached the average, but that of Korea is still much lower than the average. The proportion of consumption tax in Korea is increasing toward the average, and has become bigger than that of Japan. Korea and Japan, commonly, have the characteristics of British-American type in that importance of corporate income tax and property tax tends to be bigger than the average, which has become more conspicuous recently, while the proportions of all the other taxes are lower than the average. In both Korea and Japan, the proportion of personal income tax is smaller than the average, not playing a significant role.
(2) Direct tax and indirect tax

Generally, there has been a traditional ideal that welfare states should prefer direct taxes and avoid indirect taxes. Contrary to this, there is an argument that increasing indirect taxes as well as direct taxes is crucial to expanding source of taxation (Kato, 2003). Under the context, the purpose is to investigate whether direct taxes, along with indirect taxes, have indeed increased to bear high burden.

In the category of direct tax, personal income tax, corporate income tax, property tax and social security contributions are included, and in the category of indirect tax, general consumption tax and special consumption tax are included.

According to time-series data [charts 18-21], the ratio of indirect taxes is stable on average, remaining at around 10%, while that of direct taxes is increasing. This is interpreted that to bear high burden, increase in indirect taxes alone is not sufficient, but increase in direct taxes should also be accompanied. Increasing indirect taxes is interpreted to mean the tendency that while the proportion of general consumption taxes remains at around 10%, the share of general consumption taxes increase and that of special consumption taxes decrease in the composition. This is because general consumption taxes, unlike special consumption taxes, are more advantageous for securing financial resources. Therefore, the earlier argument is regarded valid.
Chart 18: Comparison of Proportion Between Direct Tax and Indirect Tax of Major OECD States - 1965
Chart 19: Comparison of Proportion Between Direct Tax and Indirect Tax of Major OECD States - 1980
[Chart 20] Comparison of Proportion Between Direct Tax and Indirect Tax of Major OECD States – 1995
Progressive tax and regressive tax

There has been a traditional ideal that progressive taxes levied on income should be used as financial resources for social welfare. Contrary to this ideal, it is argued that regressive taxes, together with progressive taxes, should also be used to meet increasing demand for financial resources (Kato, 2003). So, this argument is being examined here.

Personal income tax, corporate income tax and property tax are considered as progressive tax; and general consumption tax, special consumption tax and social security contributions, which are imposed at a fixed rate, are considered as regressive tax.

Looking at changes on average, the progressive taxes increase and regressive taxes also tend to increase. Therefore, it can be said the above written assumption is valid. The size of progressive taxes and that of regressive taxes tend to be stable at the averages of 1995 and 2008. Notable state is Denmark, of which the size of progressive taxes has unusually increased to be stable near 30%.
[Chart 22] Comparison of Proportion Between Progressive Tax and Regressive Tax of Major OECD States – 1985
Corporate tax and non-corporate tax in relation to liquidity of capital

General argument is that globalization causes a rise in the liquidity of capital; therefore, if corporate tax is raised, capital outflow will increase, and this, in turn, will have negative effects on economy and tax revenue. Here, the purpose is to look into the validity of the argument based on time-series data.

Corporate tax is considered as a liquid tax, and other taxes as illiquid taxes.

Looking at the changes on average, corporate tax shows stable tendency until 2008 whence it starts to be on the rise. Overall tendency in 2008 is corporate tax remains on the same level or increase except in the United States and Germany. From this, a conclusion can be reached that no tendency to reduce corporate tax as a countermeasure against capital outflow is not observed, and corporate tax is slightly on the rise recently. This is the result that can be interpreted in the same context that importance of corporate tax in the composition of tax revenue of individual states has not decreased.
Chart 26: Comparison of Proportion Between Corporate Tax and Non-Corporate Tax of Major OECD States - 1965
Chart 27: Comparison of Proportion Between Corporate Tax and Non-Corporate Tax of Major OECD States – 1980

The chart compares the proportion of corporate and non-corporate tax for major OECD states in 1980. The countries listed are: Sweden, Finland, Norway, Denmark, Germany, France, Belgium, Austria, Netherlands, UK, US, Canada, Australia, Spain, Italy, Portugal, Greece, Japan, Korea, and Average.

The y-axis represents the countries, while the x-axis shows the proportion with categories from 0.0 to 50.0. The chart indicates the relative contribution of corporate and non-corporate taxes for each country.
Chart 26: Comparison of Proportion Between Corporate Tax and Non-Corporate Tax of Major OECD States: 1995
Comparison of the Proportion Between Corporate Tax and Non-Corporate Tax of Major OECD States - 2008
4. Conclusions and policy implications

Key conclusions are as follows:

First, high welfare accompanies high burden. Both Northern European and continental-type states, which are high-welfare states, show the high-burden tendency as both tax burden ratio and ratio of social security burden are above the average. Particularly, since 1980, unlike in 1965, ratio of social security burden is also at high level, above the average, though that of Northern European type is a little lower than that of continental type. Instead, in terms of tax burden ratio, the other part of national burden ratio, continental type is smaller on average. Of universalistic states, Denmark is the state that shows totally different characteristics. It is a high-welfare state that shows little dependence on social security contributions but extremely high dependence on taxes. On the other hand, in the states that belong to British-American type, both national burden ratio and ratio of social security burden are at low level, under the average, except that Britain showed unusually high national burden ratio in the past. Usually, in this type of states both tax burden and social security burden exist, but Australia shows a unique case which is centered on taxes with almost no social security burden.

In the case of those states that belong to Southern European type, which is classified to be similar to continental type, they show the tendency to transform into high-welfare states with the increase in social security expenditure. This trend is more certain as it gets nearer to recent times and correspondingly to this, the ratio of social security burden is also approaching high level. On the other hand, in terms of national burden ratio, which includes tax burden ratio, Italy is at high level while Spain is near the average in 2007. They are those Southern European states that are having trouble these days. Comparison between their welfare level and burden level, without regard to institutional inefficiencies in those states, can explain the reason why they are having financial crisis since 2008. They pursued to becoming high-welfare states without building up the structure that can bear high burden as in advanced welfare states.

Second, there exist such tax structures that can sustain high burden. It can be said that there exist such financing structures that correspond to high welfare and high burden, and low welfare and low burden in accordance with the typology of welfare states, except for changes resulting from short-term fluctuations. This means when we consider a financing structure that will be able to cope with increasing welfare demands in Korea, we cannot consider it excluding these structural options. The results of researches on the composition of taxes related to this finding are as follows:

<Direct tax/Indirect tax> The argument that increasing indirect taxes, as well as direct taxes, is crucial to expanding sources of taxation is valid based on time-series data.

<Progressive tax/Regressive tax> The argument that increasing regressive taxes, as well as progressive taxes, is crucial to affording increasing demand for financial resources is valid based on time-series data.
<Corporate tax/Non-corporate tax> Tendency to reduce corporate tax, as a countermeasure taken for fear of capital outflow that results from globalization is not observed; rather, corporate tax is slightly on a rising trend. This is the result that should be interpreted in the context that importance of corporate tax in the composition of tax revenue of individual states did not diminish.

Finally, policy implications for Korea are as follows:

First, if it is assumed, as the result of this research, there exist such financing structures that correspond to high welfare and high burden, and low welfare and low burden in accordance with welfare state typology except for temporary and partial changes due to short term fluctuations, we cannot exclude these structural options when we consider choosing a financing structure to cope with increasing welfare demands in Korea. There are at least three structural directions in bearing high burden to afford high welfare. Northern European and continental-type states commonly use all available sources of revenue, and consumption tax plays an important role in both types. However, the first type, Northern European type, mainly uses personal income tax, while also using social security contributions on a high level near the average. On the other hand, the second type, continental type, mainly uses social security contributions, while using personal income tax on the level near the average. Besides these general tendencies of Northern European type and continental type, the third type is Denmark, which uses personal income tax on an extremely high level, while using social security contributions marginally. In Northern European and continental type-states, corporate tax and property tax do not play an essential role, but have a role that is not negligible.

Second, though it seems that Korea, being centered around social insurance on structural perspective, should sharply elevate the proportion of social security contributions as in continental-type states. But, considering the fact, mentioned earlier in the expenditure section, that expenditure on family and active labor market policies contributes to economic growth, Korea should lessen the role of cost-increasing social security contributions to a comparatively smaller level than that of continental type and raise the proportion of consumption tax and personal income tax to be used for spendings that will help attain economic growth as in Northern European-type states.
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