

Network analysis of welfare politics in Korea: Focusing on social insurance legislation in the 18th National Assembly*

Min, Ki Chae** and Kim, Young Mi***

This paper focuses on action and actor beyond the welfare attitudes. This study aims to analyze the network pattern of joint submission among assemblymen in order to specify the dynamics of welfare policy making process. Research method is SNA (social network analysis). Data come from legislation information system in the National Assembly of the Republic of Korea. 11 legislations, 23 joint broader groups and 118 members of the National Assembly relation with five social insurance (the National Pension Act, the National Health Insurance Act, the Industrial Accident Compensation Insurance Act, the Employment Insurance Act, Act on Long-Term Care Insurance for the Elderly) of former part of eighteenth assembly (2008-2010) are network analysis objects. The main findings are as follows. First, the network of the members of National Assembly is a dense network form. Second, Sim Jae-Chul who has three times elections and is president of the Policy Board of the Hannara party has the highest degree centrality and prestige centrality. Lee Kyung-Jae who has four times elections in Hannara party has the highest closeness centrality and Chun Hye-Suk who has only one election in Democratic party has the highest between-ness centrality. Conservative party has taken the lead in the legislation in relationship with five social insurance more than liberal party. And progressive parties have not showed an active role. Third, main actors' attributes is affiliated in conservative party and in Committee on Culture, Sports, Tourism, Broadcasting, and Communications, unaffiliated in Health and Welfare Committee and Environment and Labor Committee which have responsibilities passing a bill about five social insurance, and have more three times election's experience.

Keywords: *welfare politics, social network analysis, social welfare legislation, social insurance, joint submitted bill*

* Translated from the article published in the *Korean Social Security Studies* vol. 28, no. 1 (2012), with permission from the Korean Social Security Association.

** Researcher, Institute of Social Welfare, Seoul National University.

*** Assistant Professor, Department of Social Welfare, Dongseo University.

I. PROBLEM STATEMENT AND RELEVANCE OF RESEARCH

Welfare policy making is a dynamic process involving various actors interacting through conflict, compromise, and coordination with diverse strategies based on each person's problem recognition and motives. In order to develop welfare policies, political elements are inevitable. Welfare policy is a product of politics, which reflects Korea's social welfare legislation process to date.

In Korea, state's welfare has steadily expanded through the decade of the people's government and participatory government. Intensified unemployment and poverty during the economic crisis of 1997 and the absence of a social safety net caused a sudden increase in demand for welfare services, which had been latent and oppressed until then. Both governments' pro-welfare propensity, the emergence of various civic organizations and interest groups, and their active participation at policy making processes played a pivotal role in institutionalizing these needs by establishing and revising laws. In addition, the Free School Meal program, implemented on a national basis at the fifth local election on June 2, 2010, which triggered the 'universalism vs. selectivism' welfare dispute, and as a result, welfare became the most important issue on the political agenda. Finally, on August 24, 2011 a residents' poll was undertaken in relation to the Free School Meal proposal in Seoul. As a result, the residents' poll was abandoned due to low voter turnout. Furthermore, the process for the residents' poll was distorted by a confrontation between ruling and opposition parties, or based on political ideologies rather than on serious discussion and arguments about the direction of welfare policy. Its impact was enormous. For example, the mayor of Seoul, Se-Hoon Oh handed in his resignation. However, it is obvious that Korea's welfare politics underwent epoch-making transformations. For example, welfare issues, concrete policy details and even ordinary life issues such as school meals became the object of voter interest for the first time. In addition, making a stance on welfare policies and considering the alternatives became the core agenda of all political parties and politicians, regardless whether they were conservatives or progressives.

In this context, this paper aims to analyze Korea's welfare politics by

focusing on the 'actors' surrounding welfare policies and their 'actions'. Until now, research on welfare politics in Korea did not pay enough attention to examining actions and actors. Rather, it has mainly focuses either on perceptions and attitudes towards welfare (S.K. Kim and W.O. Jung 1995; K. Choi and J.S. Ryu 2000; S.K. Lee 2002; J.S. Ryu 2004; J.S. Lee 2009) or the characteristics of policy making processes which focus on specific welfare programs (J.H. Yoon 1997; H.S. Kwon 2000; S.H. Baek 2000; B.Y. Ahn 2000; C.G. Han 2001; Y.Y. Park 2002; W.S. Hyun 2008). Naturally, welfare perceptions held by members of society such as general ideas about the social welfare system, attitudes about the main actors of welfare policy and basic principles, and social attitudes about the redistribution of wealth or welfare state's justification can be expressed as a certain stance and actions on a specific issue, and accordingly this can have a critical effect on welfare policy decisions, and even on decisions on the direction of the welfare state. In this sense, research on perceptions of welfare is still indispensable in terms of studies of welfare politics. However, politics should be proved by concrete actions, not by perceptions and attitudes. In order to verify the patterns of welfare politics more directly and clearly, it is necessary to investigate which types of actors undertake what types of political actions, and the meaning of specific actions and subsequent results.

Who are the political actors involved in Korea's welfare policies? The actors involved in welfare policies are diverse such as the National Assembly, various political parties, administrative departments such as the Ministry of Health and Welfare, civic organizations, labor groups, employer associations, and special interest groups. Likewise, these various political actors have recently become more involved in Korea's welfare policies. This is because, to date, historically, political arguments in Korea mainly focused on anti-communism, economic development, regional development, and unification. Welfare issues were always on the periphery of politics in Korea. The need for welfare had been oppressed before the era of democratization in 1987. However, as the authoritarian ministry lost its hold on power in the 1990s, various civic organizations appeared rapidly, and the nation's diverse and complex welfare needs, which had been suppressed, emerged. A number of civic organizations and labor groups became critical actors in Korea's welfare politics by continuously participating in the process of social welfare

legitimization, providing policy alternatives, gathering all social groups and inducing support for the passing of bills.

Nevertheless, this paper will focus on the National Assembly's role as a main actor participating in the social welfare policy making process. Because even though various civic organizations and interest groups can intervene in the social welfare policy making process in many ways, and exercise some political influence, it is, after all, members of the National Assembly who have the legislative power to lay and approve a bill. In spite of the importance of the parties and assemblymen in terms of welfare policy making process, they did not stand out as the main policy actors until now. This is because Korea's political parties did not originally function as policy parties. In the absence of policy parties preparing policy alternatives on pending welfare issues, it was the various civic organizations and special interest groups who filled the vacancy. In addition, the authority of policy making was primarily concentrated in the ministry as maintaining an authoritarian political system (K.J. Hong and H.G. Song 2005, 8). However, proposals submitted by members of National Assembly have, in recent times, started to increase,¹ and legislation and amendments of social welfare related laws are exercised quite actively. In summary, welfare politics can be understood in relationship with various actors such as government officials, politicians, and special interest groups, but this research emphasizes the legislative actions by the 'elected politicians'.

Therefore, this paper will analyze patterns of welfare politics focusing on social welfare related 'legislation' and 'the legislator' which are one of the characteristics of Korea's welfare politics. In order to specify the dynamics of the social welfare policy making process, network patterns of joint submissions of assemblymen will be examined. To be specific, the purpose of this paper is to investigate who are the leading forces and the main actors during the process, and to identify key attributes by performing a network analysis of the assemblymen involved in the legislation of five

¹ The legislative body had a bad reputation as the 'body which passes the bill' since it only acted as a yes man in terms of passing bills. However, after the 15th National Assembly, a bill submitted by the assemblymen started to outnumber bills submitted by the government, and in the 17th National Assembly bills submitted by the assemblymen counted for 71% out of all passed bills (H.C. Lee 2009, 256).

social insurances (the National Pension Act, the National Health Insurance Act, the Industrial Accident Compensation Insurance Act, the Employment Insurance Act, and Act on Long-Term Care Insurance for the Elderly) at the 18th assembly.

The paper is expected to contribute to an expansion of the field of welfare politics studies in terms of focusing on welfare related ‘bill submission’ as an actual ‘action’, and ‘submitting assemblyman’ as an ‘actor’ beyond the welfare perception and attitude approach, and emphasizing on the assemblyman to understand who attracted the most attention as welfare policy actors. In addition, so far previous studies on welfare policy decision making concentrated only on the specific welfare programs, and mostly performed analyses of content about the process so that they could not identify the specific level of an actor’s role. However, this paper will be able to empirically inquire into the dynamics of welfare politics by extending the analysis unit to the overall process of the aforementioned five social insurance legislations, and performing a network analysis to look into the main forces and actors, and the network around them. Welfare is established as an essential political agenda in Korea society, and the role of the political parties and the National Assembly will be more important in the emerging field of welfare politics. Even though this research has limitations in terms of analyzing social insurance policy making actions during a certain period of time, it also anticipated that this research will play a crucial bridging role for future studies.

II. LITERATURE REVIEW

1. Previous Studies on Korea’s Welfare Politics

There are largely four categories to analyze related to Korea’s welfare politics. The first one relates to the social cleavage structure of welfare politics.’ The second one is the empirical study of determinants of perceptions and attitudes based on the premise that welfare perceptions and attitudes will influence changes to the system. The third one is the study of policy making processes focusing on specific institutions such as the National Pension, Employment

Insurance, or the National Basic Livelihood Security System. The final one is the study about policy making structures by investigating the social networks of the major welfare policy decision makers.

The first and second categories attempt to explore changes in the welfare state and welfare politics at the micro level. However, there are some limitations in interpreting the research results in terms of the cleavage of interest relations such as class, gender, race, ethnic and social status. Perceptions according to it are a separate matter, and it is hard to actually recognize actions. In short, this paper has the merit of actually investigating actions and actors beyond the study of attitudes and perceptions based on social network analysis. The third and fourth category attempt to investigate Korea's welfare politics focusing on actors actually involved in the specific welfare policy decision making process, and the political, economic and social circumstances surrounding them. These research trends could not consider the assemblyman in the legislature who is a practical actor in the welfare politic era as target by concentrating only on new welfare policy makers besides administration. Social network analysis is beneficial because it helps to see the network among assemblymen and the attributes according to them by visually exploring the network of bill submissions.

1) Studies on the Social Cleavage Structures of the Welfare Politics

The transformation of welfare states is based on a bilateral and dynamic political process, and is related to the complex social interest relations of individuals (S.H. Ahn 2000a). To date, from a mainstream perspective of social policy, welfare politics has been understood as focusing on class by connecting the changes and rise and fall of welfare states with political determinants such as political ideology (Palme 1990).

However, a number of recent studies such as Svallfors (1995) and S.H. Ahn (2000a; 2000b; 2002; 2003) argue that the significance of the class concept as a framework explaining welfare politics has decreased as environmental factors around the welfare state changed including intensified economic globalization, the decline of leftist ideology and increased cultural diversity. In the globalized society, mobility of the working class has diminished, and the number of leftist party members has decreased. After all, the phenomenon of non-hierarchical cleavage requires a modification of power resource

theory. Therefore, new various cleavage points have arisen besides class-based cleavage, which includes cleavage in the employment sector, gender cleavage, and generational cleavage (S.H. Ahn 2000a, 196).

S.H. Ahn (2000a) suggested 'a theoretical framework of three statuses of welfare rights and duties' as an alternative framework to understand political dynamics of the welfare state. Interests related to the welfare of state are comprehensively proposed by the interest cleavage such as status as welfare recipient, status as taxpayer, and status as welfare service provider, beyond a dualistic conflict structure such as labor versus capital. The advantage of the welfare status theory, above all things, is that it digs into the 'duties according to the extended rights' problem presented by Marshall (1950), and criticizes previous studies which limit welfare politics interest as welfare rights. However, these studies are limited in terms of not being able to expand their scope of study to practical actors by not overcoming an individual's welfare attitude or hypothetical political support level.

Nevertheless, the importance of these studies is that even though planning, submitting, and passing welfare policy is the role of assemblymen, they have no choice but to be sensible to people's interests and needs under the representative democracy system. As well proved by the welfare argument, how the programs are composed and what details relate to the welfare state is a critical factor which decides future development of a welfare state and its subsequent rise and fall, and this macroscopically represents the individual's social interest (S.H. Ahn 2000a). To sum up, in order to understand the dynamics of welfare politics, it is necessary to recognize that the structure and its details can be differentiated by an individual's social interest, and accordingly this can affect specific policies and success and failure of the welfare state. Therefore, although an analysis of welfare status cannot show substantive actions about expansion or reduction of welfare, it can be a crucial basis for understanding the process.

2) Studies on Welfare Perceptions and Attitudes

Making stances and choices about welfare policy can be caused by the individual actor's ideology, attitudes, and perceptions, and this will be diverse according to each actor's differential interest. This difference in perception will have a significant influence on policy decision, and the development

aspect of welfare politics. Based on this assumption, studies on perceptions and attitudes of welfare have been undertaken since the mid-1980s domestically and in foreign countries. The major studies are as follows.

The first empirical study of Korea's perception of welfare is presumed to be Y.M. Kim (1986)'s study. He argues that perceptions of welfare differ according to occupational cluster. To be specific, he asserts that while managerial and clerical workers and employers emphasize welfare of the state, self-sustained workers stress individual responsibility. After the 1990s, studies on welfare awareness, perceptions and attitudes have been undertaken based on the differentiation of class (Y.M. Kim 1991; C.M. Ahn 1995), and that welfare attitudes between classes are not differentiated and there are no significant differences (H.J. Kim 1999). In the 2000s, a more diverse analysis has been attempted. First of all, J.S. Ryu (2004)'s study is remarkable. According to this research, an integrated model of three elements such as social status, welfare status, and welfare norms and value orientation is helpful to account for welfare attitude. That is, a model which added 'welfare norms and value orientation' variables, which are formed through the process of socialization as well as socio-demographic characteristic and welfare status enhances the explanatory power of welfare attitudes. Secondly, E.S. Joo and J.M. Baek (2007) reports that both 'class and welfare needs' and 'experience of public welfare recipient' have a significant influence on perceptions of welfare. There is also the assertion (S.Y. Kim 2010) that 'social trust' besides economic variable which reveals material interest relations has a meaningful impact on welfare awareness. However, these kinds of studies are used without a clear classification of awareness, perception and attitude, or the relationships among them, so that it requires academic consensus. Moreover, some studies which enumerate variables without verifying the theory, which is original purpose of empirical analysis, left much to be desired. Most of all, these types of studies could not extend the scope to 'action and actor', the main focus of this study.

3) *Studies on the Social Welfare Policy Making Process*

After the 1990s, as policy decision makers participating on the social welfare system's legislation and amendments are becoming increasingly varied, studies on interpreting Korea's welfare politic geography through

the analysis of those process increased (J.H. Yoon 1997; H.S. Kwon 2000; S.H. Baek 2000; B.Y. Ahn 2000; C.G. Han 2001; Y.Y. Park 2002; W.S. Hyun 2008). Most studies concentrated on the National Pension, National Health Insurance, Employment Insurance, and the National Basic Livelihood Security Act. C.G Han (2001) and Y.Y. Park (2002)'s studies performed an analysis of the legislation process of the National Basic Livelihood Security Act which was enacted in 1999. The passage of the National Basic Livelihood Security Act has a pivotal meaning in terms of increasing the possibility of securing the 'national minimum living standard', and upgrading Korea's social welfare level by providing the legal grounds to secure a minimum level of human dignity as definite social rights. In this way, they tried to explain the meaningful legislation process by including various factors such as the economic circumstances of serious unemployment and poverty caused by the Asian financial crisis in 1997, Kim Dae-Jung's reformist and pro-welfare ministry, and active intervention of civic groups such as People's Solidarity for Participatory Democracy. However, both studies asserted that a more powerful factor was the political reaction to settle public sentiment following Kim Dae-Jung ministry's political crisis (clothes lobbying affair, the Korea Mint Corporation's inducement of strike etc.), rather than the impact of civic groups' activities such as petitioning for legislation in the policy making process. These studies are meaningful in terms of analyzing the various actors in the process of the specific bill's formation and legislation, and the political and economic contexts around them.

W.S. Hyun (2008)'s study explored the policy environment in reform process of the National Pension from 1998, whether the pension system is path-dependent, interest and social organization's role, the main actors, and the status, role and impact of the political system and veto point. He claimed that there was no institutional device for social consensus so that the government and ruling party took the lead on exclusive policy decision making. These studies are heavily related to this research in a sense because they focused on the specific 'actions' of certain institution's development processes, and identified the actors surrounding the actions. However, there is a limit of not being able to specifically show relevant actors' level of role due to the absence of empirical analysis.

4) *Studies on the Social Network of Social Welfare Policy Actors*

The actors participating in the policy decision making process are connected through complex social relations surrounding the policy, and this connection network can be understood as a policy decision structure which restricts resource and opportunity that the actors can possess in regard to policy decisions (K.J. Hong and H.G. Song 2005, 11). In the case of previous studies outlined above, they emphasized the individual actors around the specific policy and the environment. On the other hand, K.J. Hong and H.G. Song (2005)'s study tried to verify the structure of policy decision through network analysis of diverse actors around numerous social welfare policy issues. It focused on the legislative process of the social insurance and public assistance² issue raised during Kim Young-Sam's ministry and Kim Dae-Jung's ministry. It analyzed the petition process leading up to the preparation of the bill, the actual preparation of the bill, submission to the National Assembly, and the communication network structures between 33 organizations such as the administration involved with passing it through the National Assembly, the National Assembly and parties, employers and labor unions, interest groups, civic organizations and national research institutes. In brief, it inquired into the bill-related information exchange between plenty sufficient number of policy making actors, who play a leading role in accordance with communication methods, time, and degree, and who acts as a coordinator or inter-mediator role, who is a passive and peripheral actor, and where the veto point is on the policy decision making process. As our paper outlines, this study also appreciates the importance of the network rather than policy maker's individual 'behavior'. However, while this study mainly explores the organization's participation method which was revealed in the process of preparing, submitting and passing the bill, our research will set limits of the analysis scope to the inside of legislature, especially focusing on the joint submission.

² Twelve incidents related to the National Pension reforms, 15 incidents related to the National Health Insurance Act legislation, five incidents related to the National Medical Insurance Act legislation, eight incidents related to the National Assistance Act reform, four incidents related to the Employment Insurance Act legislation were the targets of analysis.

2. Network of Assemblymen's Legislation

Of the pre-existing literature, there is an almost complete lack of studies on legislation, and absolutely no analysis on the network of welfare legislative bill. An analysis of the network for the legislation bill has been undertaken mostly in the fields of sociology and politics (Y.S. Yeom 2007; R.W. Kim 2009; B.K. Lee 2009; B.K. Lee and Y.S. Yeom 2009). These studies primarily concentrated on attributes of the network which appeared in the bill proposal and voting process, and attempted to investigate the factors which have an influence on those attributes.

These studies focus on joint submission behavior, but it is crucial for the assemblymen to consider whom to propose the bill to, or from whom to accept the proposal when submitting the bill since submitting one bill requires more than 10 joint submission assemblymen (J.W. Choi 2003) in the National Assembly. Especially due to the introduction of the bill real-name system, assemblymen came to have more responsibility to undertake legislative activities (J.W. Choi 2004), so that choosing each other at joint submission became more important.

A great deal of research have demonstrated that joint submission behavior can be an objective of proper analysis which reveals the interaction and relationship between the assemblymen (Burkett and Skvoretz 2001; Fowler 2006a; 2006b; Epstein et al. 2007; Cho and Fowler 2007; J. Woon 2008; Gross and Shalizi 2008; Zhang et al. 2008). Fowler (2006b) asserted that a social connection exists between a representative proposer and a co-proposer during the process of submitting a bill. If a co-proposer is active, a co-proposer and representative proposer discuss it together during the proposal phase, and spend time and work on it together. It is just a rule to have only one representative proposer so that stated as co-proposer. Even though a co-proposer is not active, it is considered that bill submission presents the relationship between representative and co-proposer because they must have decided to prepare a joint submission based on their personal relationship, or at least they would have submitted it together when they are favorable to a bill or a co-proposer is trusted as a representative proposer (B.K. Lee and Y.S. Yeom 2009, 1339).

In addition, there are a few grounds for the arguments that suggest joint submission behavior shows the network among the assemblymen (H.W. Lee 2011, 101). First, the participants get to understand each other's political identities while sharing their political ideas or opinions about the current issues for joint submission. Second, since there is tacit cooperative relationship in case of joint submission, if one assemblyman supported the other assemblyman, he or she can get help from the other assemblyman in return next time. Third, there are additional factors which enable assemblymen to participate together such as special connections and shared ideology.

According to the previous studies on network analysis of bill submission, they suggest 'a seniority effect', 'a party (ruling party) effect', 'a reciprocity effect', and 'a transitivity effect' as essential factors for explaining network attributes. These factors will help to understand the political dynamics of the legislative process in the National Assembly. The main factors of joint submission network can be summed up as follows.

To begin with, Burkett and Skvoretz (2001) discovered that the 'seniority effect' diminishes when considering the number of 'representative proposals', the reciprocity effect is more dominating, and especially assemblymen who are in the same 'party' or share the 'ideology' have a high tendency to exchange a bill (B.K. Lee and Y.S. Yeom 2009). According to B.K. Lee and Y.S. Yeom's (2009) study which analyzed the mechanism of joint submission network formation among assemblymen focusing on bills submitted in the Health and Welfare Committee during the 17th assembly, the 'party' effect appeared to be crucial. That is, it turned out that the 'ruling party' rather than the opposition party proposed and received a bill more intensively. Furthermore, it proved that reciprocity (a person who I chose to be a friend chooses me as a friend) and transitivity (a friend of mine becomes my friend) effect played an indispensable role in the joint submission process.

After all, the most important thing in the policy decision making process is whether a bill is passed or not, and this will be influenced by the proposer's power at the National Assembly. Therefore, this paper aims to explore the network of welfare bill's submission, and analyze the actors' attributes among them.

III. RESEARCH METHODS

1. Analysis Objects

The objects of analysis for this paper are ① joint submissions related to five social insurances (the National Pension Act, the National Health Insurance Act, the Industrial Accident Compensation Insurance Act, the Employment Insurance Act, and Act on Long-Term Care Insurance for the Elderly) of former part of 18th assembly, and ② social network among assemblymen who participated in the joint submission.

First of all, based on December 7, 2010, information about the five social insurance legislation and related assemblymen is collected from legislation information system in the National Assembly. Five processed social insurance bills³ and submitting assemblymen at the 18th assembly are presented at <Table 1>. To begin with, there are two processed bills on the National Pension Act, and there are eight groups of assemblymen who submitted those bills. Next, there is one processed bill on the National Health Insurance Act, and three groups of joint submission. There are three processed bills, and four groups of joint submission. In addition, there is one processed bill relating to the Employment Insurance Act and the Industrial Accident Compensation

³ Bills are categorized largely as pending bills and processed bills. Pending bill literally means a bill which is pending, and processed bill is classified into approved (passed) process bill, rejected bill, terminated bill (alternative termination, expired termination) and withdrawn bill. Since this paper focuses on the result like 'actions' of assemblymen, only 'approved (passed) processed bill' will be object of research object. In other words, out of all processed bills, pending bills and rejected bills and withdrawn bills were not included in this research, but only 'alternative termination bill' which is processed for the 'approved bill' of a similar bill is included. The rationale of this research object's limitation is that a large number of pending bills are automatically terminated at the moment of expiration, and rejected bills and withdrawn bills have not resulted in specific actions(legislation), and most approved (passed) bills are made from alternative terminated bills' revision. In the case of the National Pension Act, there are 26 pending bills, and 11 processed bills (two approved bills, eight alternative termination bills, one withdrawn bills). Of these, two approved bills by the chair of Health and Welfare Committee are the result of action (legislation) through the revision of eight alternative termination bills.

Table 1. Analysis Objects: Legislation and Members of the National Assembly of the five social insurances for the 18th assembly

| Category | Legislations | Main contents | Legislative date | Joint broacher group |
|--|---|---|------------------|-------------------------------------|
| National Pension Act | National Pension Act Partial Amendment Bill <Alternative> | Unification of social insurance fee collection task to National Health Insurance Corporation | Apr. 30, 2009 | 12 persons including Lee Hye-Hoon |
| | | | | 19 persons including Sim Jae-Chul |
| | | | | 11 persons including Son Sook-Mi |
| | | | | 16 persons including Choi Young-Hee |
| National Pension Act | National Pension Act Partial Amendment Bill <Alternative> | National Health Insurance Corporation performs customized social welfare services for the elderly, and project for “counseling the old aged life plan and supporting income activity” | Jan. 8, 2009 | 14 persons including Kim Sung-Soon |
| | | | | 10 persons including Lee Ju-Young |
| | | | | 12 persons including Sim Jae-Chul |
| | | | | 10 persons including An Hong-Jun |
| National Health Insurance Act | National Health Insurance Act Partial Amendment Bill <Alternative> | Unification of social insurance fee collection task to National Health Insurance Corporation | Apr. 30, 2009 | 19 persons including Sim Jae-Chul |
| | | | | 12 persons including Lee Hye-Hoon |
| | | | | 11 persons including Son Sook-Mi |
| Industrial Accident Compensation Insurance Act | Industrial Accident Compensation Insurance Act Partial Amendment Bill <Alternative> | Adjustment of fairness for pneumoconiosis workers’ compensation level | Apr. 28, 2010 | 13 persons including Cho Jin-Rae |

Table 1. (continued)

| Category | Legislations | Main contents | Legislative date | Joint broacher group |
|---|--|--|------------------|--|
| | Industrial Accident Compensation Insurance Act Partial Amendment Bill <Alternative> | Unification of Workers Accident Medical Corporation to Korea Workers' Compensation and Welfare Service, and contract collection task out to National Health Insurance Corporation | Dec. 30, 2009 | 19 persons including Sim Jae-Chul |
| | Industrial Accident Compensation Insurance Act Partial Amendment Bill | Change of the name and role of Industrial Accident Compensation Insurance Deliberation Committee | Sep. 16, 2009 | 11 persons including Lee Yoon-Sung |
| Employment and Industrial Accident Compensation | Employment and Industrial Accident Compensation Partial Amendment Bill about collecting insurance fee etc. | Cosigning the task of collecting insurance fees (notification, management of receipt and default fees) of Employment and Industrial Accident Compensation to National Health Insurance Corporation | Dec. 30, 2009 | 19 persons including Sim Jae-Chul |
| Employment Insurance Act | Employment Insurance Act Partial Amendment Bill | Unification of estimation criteria of Employment Insurance and Industrial Accident Compensation Insurance like other social insurances (wage → taxable income) | Dec. 30, 2009 | 19 persons including . Sim Jae-Chul |
| Act on Long-Term Care Insurance | Act on Long-Term Care Insurance for the Elderly Partial | Executive director's obligation of data management for providing | Feb. 18, 2010 | 13 persons including Kim Chung-Hwan 11 persons including Baek Sung-Un |

Table 1. (continued)

| Category | Legislations | Main contents | Legislative date | Joint broacher group |
|-----------------|--|--|------------------|-----------------------------------|
| for the Elderly | Amendment Bill <Alternative> | allowance at the long-term care facilities | | 10 persons including Lim Doo-Sung |
| | | | | 11 persons including Chun Hye-Suk |
| | Act on Long-Term Care Insurance for the Elderly Partial Amendment Bill | Reduction of recipient's partial expense of long-term care benefit in agricultural and fishing zones | Apr. 29, 2009 | 17 persons including Chun Hye-Suk |
| | Act on Long-Term Care Insurance for the Elderly Partial Amendment Bill | Exceptional permission for foreign immigrant workers when they ask for exclusion of insurance | Mar. 2, 2009 | 16 persons including Lee Ae-Joo |

1. Data is sourced from the legislation information system (<http://likms.assembly.go.kr/bill/jsp/main.jsp>)
2. Objects were the members of the National Assembly of 18th assembly based on December 7, 2010.
3. 'Approved process bill' is the standard among the bill submitted by the 'assemblymen' not by government. Namely, pending, rejected, withdrawal, returned bills are not included as objects of analysis.
4. It includes a bill which is an alternative termination bill for an approved process bill of a similar bill.
5. An alternative termination bill is stated as <alternative>. The bills that are not stated as <alternative> are passed bills that original and revised bill are passed.

Insurance Act at the same time, and one group. Also there is one processed bill on the Employment Insurance Act and one group. At last, there are three processed bills for the Act on Long-Term Care Insurance for the Elderly, and six groups participated on the joint submission. Furthermore, processed bills are turned out to be processed mostly during the Assembly plenary session in 2009.

As stated above, there were 11 legislations, 23 joint broacher groups and 118 (total number of assemblymen was 298 on the basis of December 7th in

2010) members of the National Assembly related to the five social insurance of 18th assembly.

2. Analysis Method

The research applied Social Network Analysis method by utilizing the Ucinet 6.0 program in order to analyze the network of assemblyman x assemblyman (Mode 1), four centrality indices, and assemblyman x legislation (Mode 2). Main variables are assemblyman and legislation.

First of all, we will investigate assemblymen in terms of what kind of network has been constructed by visualization. In order, we will explore degree centrality, closeness centrality, between centrality, and prestige centrality of assemblymen's network who participated in the submission of the five social insurances (the National Pension Act, the National Health Insurance Act, the Industrial Accident Compensation Insurance Act, the Employment Insurance Act, and Act on Long-Term Care Insurance for the Elderly) bills of 18th assembly. Finally, we will examine who took part in submitting all five bills by exploring the two-mode network of assemblymen and legislations.

At this time, network scoring is as follows. At first, the network between assemblyman and assemblyman is based on whether they undertook a joint submission or not. We allocated one point whenever there is a joint submitted bill, zero points if there is no single joint submission. Secondly, in the case of the two-mode network of assemblymen and legislations, when they participate in submitting relevant bills at least once, they are all allocated one point, whereas zero points are allocated if they did not participate at all. Bill types are classified into the five categories of pension, health, industrial accident, employment, and the elderly. Attribute variables for verifying the characteristics of the assemblymen who have high centrality are categorized by party (Hannara Party, Democratic Party, Liberty Forward Party, and Independent), numbers of getting elected, and committee affiliations.

According to Y.H. Kim (2007), the contents of social network analysis are varied, and include solidarity (connection degree, density, inclusiveness, connection strength, and connection duration), centrality, equivalence, and structural hole. In this paper, we will try to approach from the 'centrality'

concept for the purpose of identifying the assemblymen who achieved a dominant position during the legislative process of the five social insurances.

The ‘centrality’ is the index for expressing an actor’s degree of positioning in the center of the whole network. Measuring the centrality can be approached in various ways, and if one uses a different measurement method, he or she will get a different centrality. There are four types of methods in measuring the centrality such as degree centrality, closeness centrality, betweenness centrality, and prestige centrality (eigen vector) (Y.H. Kim 2007). They are categorized according to aspect to emphasize and measure the ‘centrality’. Features of each way are explained in Table 2.

Table 2. Categories of Centrality

| Centrality | Measuring the concept | Metaphor | Meaning |
|----------------------|--|------------------------------------|---|
| Degree centrality | Number of nodes directly connected with other nodes | Wide foot | There are plenty of ‘mobilizable’ resources (people, information, power) in the network |
| Closeness centrality | Sum of the least required steps or distance to reach other nodes from one node | Closest person | It is possible to most quickly ‘access’ the resources (people, information, power) in the network |
| Between centrality | Degree of one node to be positioned ‘between’ other nodes in the network | Broker, bridge, matchmaker | It is possible to ‘intermediate, mediate’ the resources (people, information, power) in the network as many as possible |
| Prestige centrality | Degree of one node to be connected with the powerful node | An ass in lion’s skin ⁴ | Connected with the most powerful resources (people, information, power) in the network |

Source: Restructured from Y.H. Kim (2007)

⁴ ‘As if a lion’s dignity transfers to a fox who follows the lion’, one can enhance his/her influence by having a connection with a powerful person rather than having many connections with other actors.

IV. RESULTS

1. Attributes of the 18th Assembly and Social Insurance Legislation

Attributes of the 18th Assembly and social insurance legislation are listed in Table 3. It is organized based on three attributes, namely, affiliated party, number of elected members, and affiliated committee.

To begin with, if we look at the dispersion of parties for the 18th Assembly, the Hannara Party held first position with the highest ratio of seats (57.2%), followed by the Democratic Party (29.4%), the Liberty Forward Party (5.4%), the Future Hope Alliance (2.7%), the Democratic Labor Party (2.0%), Independent (2.0%), the Creative Korea Party (0.7%), the New Progressive Party (0.3%) and People First Union (0.3%). The conservative parties included the Hannara Party, the Liberty Forward Party, the Future Hope Alliance, and People First Union, which had a large percentage, roughly 65%, of parliamentary seats. The Democratic Party, namely liberalistic party, accounted for 29.4%, and the Democratic Labor Party, the Creative Korea Party, and the New Progressive Party were only about 3%. Overall, the conservative parties including huge ruling party, Hannara Party, were strong, while the liberalistic party was weak and the progressive parties were weaker.

If we look into the percentage of social insurance assemblymen compared to assembly members of each party, the Hannara Party showed the highest ratio (45.6%) whereas the Democratic Party held second position (42.5%). This indicates that even though the Democratic Party has a relatively low ratio of parliamentary seats, social insurance legislative participation was as almost active as the Hannara Party. In addition, there were no social insurance bills submitted by the progressive parties' assemblymen.⁵ Taken as a whole, since

⁵ Of course Gwak Jung-Suk of Democratic Labor Party proposed five bills (National Health Insurance Act Partial Amendment Bill on July 23, 2010, Act on Long-Term Care Insurance for the Elderly Partial Amendment Bill on July 12, 2010, National Pension Act Partial Amendment Bill on April 26, 2010, Employment Insurance Act Partial Amendment Bill on March 19, 2010, and National Pension Act Partial Amendment Bill on April 14, 2009). In this paper, however, pending bills as outlined above are not included since this research only deals with 'approved bills'.

Table 3. Attributes of the 18th Assembly and Social Insurance Legislation

| Party | No. of members (Person/%) | Social insurance assemblymen (Person/%) | Social insurance assemblymen/ No. of members (%) | Committee | No. of members (Person/%) | Social insurance assemblymen (Person/%) | Social insurance assemblymen / Committee (%) |
|------------------------|---------------------------|---|--|---|---------------------------|---|--|
| Hannara Party | 169(57.2) | 77(65.3) | 45.6 | Steering Committee of the National Assembly | 0(0) | 0(0) | 0 |
| Democratic Party | 87(29.4) | 37(31.4) | 42.5 | Legislation and Judiciary Committee | 16(5.4) | 5(4.2) | 31.3 |
| Liberty Forward Party | 16(5.4) | 2(1.7) | 12.5 | National Policy Committee | 22(7.4) | 9(7.6) | 40.9 |
| Future Hope Alliance | 8(2.7) | 1(.8) | 12.5 | Strategy and Finance Committee | 25(8.4) | 13(11.1) | 52.0 |
| Democratic Labor Party | 6(2.0) | 0(0) | 0 | Foreign Affairs, Trade and Unification Committee | 27(9.1) | 6(5.1) | 22.2 |
| Creative Korea Party | 2(.7) | 0(0) | 0 | National Defense Committee | 15(5.1) | 5(4.2) | 33.3 |
| New Progressive Party | 1(.3) | 0(0) | 0 | Public Administration and Security Committee | 23(7.8) | 9(7.6) | 39.1 |
| People First Union | 1(.3) | 0(0) | 0 | Education, Science and Technology Committee | 20(6.8) | 7(5.9) | 35.0 |
| Independent | 6(2.0) | 1(.8) | 16.7 | Committee on Culture, Sports, Tourism, Broadcasting, and Communications | 27(9.1) | 9(7.6) | 33.3 |
| Total | 296(100) | 118(100) | 39.9 | Food, Agriculture, Forestry and Fisheries Committee | 18(6.1) | 7(5.9) | 38.9 |

Table 3. (continued)

| No. of being elected | # of members (Person/%) | Social insurance assemblymen (Person/%) | Social insurance assemblymen/ No. of being elected (%) | Knowledge Economy Committee | 24(8.1) | 11(9.3) | 45.8 |
|----------------------|-------------------------|---|--|--|----------|----------|------|
| 7 times | 1(.3) | 0(0) | 0 | Health and Welfare Committee | 24(8.1) | 16(13.7) | 66.7 |
| 6 times | 4(1.4) | 0(0) | 0 | Environment and Labor Committee | 13(4.4) | 7(5.9) | 53.8 |
| 5 times | 6(2.0) | 0(0) | 0 | Land, Transport and Maritime Affairs Committee | 30(10.1) | 13(11.1) | 43.3 |
| 4 times | 20(6.8) | 6(5.1) | 30.0 | Intelligence Committee | 0(0) | 0(0) | 0 |
| 3 times | 42(14.2) | 13(11.0) | 31.0 | Gender Equality and Family Committee | 12(4.1) | 1(.8) | 8.3 |
| 2 times | 80(27.0) | 27(22.9) | 33.8 | Special Committee on Budget & Accounts | 0(0) | 0(0) | 0 |
| 1 time | 143(48.3) | 72(61.0) | 50.3 | Special Committee on Ethics | 0(0) | 0(0) | 0 |
| Total | 296(100) | 118(100) | 39.9 | Total | 296(100) | 118(100) | 39.9 |

* When they have more than two affiliated committees, the criteria for selection are as follows.

- 1) If one is affiliated with the Health and Welfare Committee and another committee at the same time, the Health and Welfare Committee should be counted.
- 2) If one is affiliated with the Gender Equality and Family Committee and another committee at the same time, the Gender Equality and Family Committee should be counted.
- 3) If one is affiliated with the Steering Committee of the National Assembly, the Special Committee on Budget & Accounts, the Special Committee on Ethics, the Intelligence Committee and another committee at the same time, another committee should be counted.

118 (39.9%) members of assemblymen out of 296 participated in the social insurance legislation process, it is evident that 4 out of 10 assemblymen are the direct actors related to the social insurance legislation process.

Next, looking at the numbers of assemblymen elected at the 18th assembly, newly-elected assemblymen were 48.3% most frequent, followed by two times election 27%, three times election 14.2%, four times election 6.8%, and more than five times election 3.7%. If we examine the ratio of social insurance legislative assemblymen compared to numbers of those elected, one time election was the highest at 50.3%. Although two times election came second at 33.8%, three times election and four times election were 31.0% and 30.0% respectively, which is almost the same. That is, from the one time election to four times election of senior assemblymen, the ratio of social insurance legislation is getting lower, but from two times election to four times election assemblymen are almost similar. Newly-elected assemblymen show a high rate of bill proposal as a result of their passion and goal to achieve even though they lack legislative experience. The reason that the newly-elected assemblymen having a higher rate of bill proposal than assemblymen elected for many terms with extensive expertise related to bill proposal reflects the fact that they are sensitive to an evaluation on legislative activities by civic groups and the media for being re-elected (B.K. Sohn 2004; H.C. Lee 2009, 264).

Finally, the attributes of the social insurance legislation in accordance with each committee (16 standing committees and two special committees) of the 18th assembly are as follows. When we look at the proportion of the social insurance assemblymen compared to the committee, the Health and Welfare Committee was the highest at 66.7%, followed by the Environment and Labor Committee at 53.8%, the Strategy and Finance Committee at 52.0%, the Knowledge Economy Committee at 45.8%, the Land, Transport and Maritime Affairs Committee at 43.3%, the National Policy Committee at 40.9%, the Public Administration and Security Committee at 39.1%, the Food, Agriculture, Forestry and Fisheries Committee at 38.9%. It is evident that the Health and Welfare Committee and the Environment and Labor Committee which are in charge of the main standing committee hold first and second position.

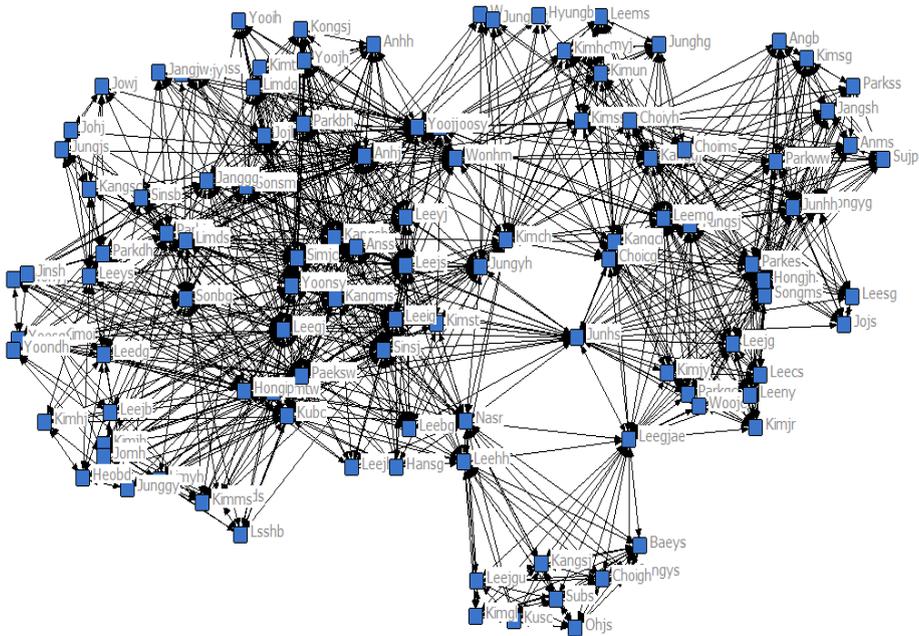


Figure 1. Network of Assemblyman x Assemblyman of Five Social Insurance Legislations of the 18th Assembly

2. Network of Assemblyman x Assemblyman of five Social Insurance Legislations of the 18th Assembly

Figure 1 shows a visualization of the network of assemblymen concerning social insurance legislations of the 18th assembly. As demonstrated in Figure 1, 118 assemblymen had quite dense networks in the legislative process of five social insurances. This characteristic of the network was a natural result which reflected ‘Section 1, Article 79, National Assembly Law’ which enables to propose a bill with more than 10 assemblymen’s agreement in terms of ‘legislation by Assembly Members’. That is, this network pattern was predictable because joint submission is inevitable where an assemblyman cannot propose a bill alone.

However, there is interesting result if we look at Figure 1 more precisely. First, while some assemblymen took their position in the center of the

network, having quite numerous degrees of connections, others are located on the periphery far away from the center of the network. Second, the network is largely formed in four kinds. It is approximately composed of four kinds in four cardinal directions of north, south, east, and west, and there are relatively strong connections inside them. Third, four groups are not separated, rather connected with other groups. In other words, they did not just propose a bill between the same groups, but also submitted jointly with members of other groups.

3. Analysis of the Centrality of Five Social Insurance Legislations of the 18th Assembly

Table 4 is the result of analyzing degree centrality and closeness centrality among the analysis on centrality of five social insurance legislations of the 18th assembly.

1) Degree Centrality

When we review the result of analysis in terms of the degree centrality index, firstly Sim Jae-Chul, who was re-elected three times by the Hannara Party and affiliated with the Committee on Culture, Sports, Tourism, Broadcasting, and Communications showed the highest degree centrality (145.000), the so-called 'wide foot' who acted in the center during the process of the five social insurance legislations. Standardized degree centrality index was 15.491, which is calculated by taking the total 145 degree centrality and dividing it by the maximum degree of 936 (145/936x100). In effect, Sim Jae-Chul acted fairly vigorously during the process of five social insurance legislations such as proposing six bills out of 23 bills.

In addition, only Hannara Party assemblymen were included within the top 15 ranks, it can be known that the Hannara Party as the ruling party exerted a strong degree of centrality in the social insurance legislation process. The first rank of degree centrality index is three times election (Sim Jae-Chul), second rank is four times election (An Sang-Su), so that assemblymen elected more than three times rather than one or two times would locate a higher position in terms of degree centrality.

Assemblymen affiliated with the Health and Welfare Committee which

Table 4. Centrality of Five Social Insurance Legislations of the 18th Assembly: Degree Centrality, Closeness Centrality

| Rank | Assemblymen (Party, No of election, Committee) | Degree Cen- trality | NrmDeg | Assemblymen (Party, No. of election, Committee) | Closeness Centrality | nClose- ness |
|------|--|---------------------------|--------|---|-------------------------|-----------------|
| 1 | Sim Jae-Chul (Hannara/3/Culture) | 145.000 | 15.491 | Lee Kyung-Jae (Hannara/4/Culture) | 425.000 | 27.529 |
| 2 | An Sang-Su (Hannara/4/Foreign Affairs) | 134.000 | 14.316 | Sim Jae-Chul (Hannara/3/Culture) | 427.000 | 27.400 |
| 3 | Yoon Suk-Yong (Hannara/1/Health) | 133.000 | 14.209 | An Sang-Su (Hannara/4/Foreign Affairs) | 429.000 | 27.273 |
| 4 | Son Sook-Mi (Hannara/1/Health) | 130.000 | 13.889 | Chun Hye-Suk (Democratic/1/Culture) | 429.000 | 27.273 |
| 5 | An Hong-Jun (Hannara/2/Land) | 127.000 | 13.568 | Kim Chung-Hwan (Hannara/2/Foreign Affairs) | 432.000 | 27.083 |
| 6 | Lee Jung-Sun (Hannara/1/Labor) | 125.000 | 13.355 | Baek Sung-Un (Hannara/1/Land) | 432.000 | 27.083 |
| 7 | Lee Ae-Joo (Hannara/1/Health) | 125.000 | 13.355 | Lee Jung-Sun (Hannara/1/Labor) | 434.000 | 26.959 |
| 8 | Won Hee-Mok (Hannara/1/Health) | 123.000 | 13.141 | Yoon Suk-Yong (Hannara/1/Health) | 436.000 | 26.835 |
| 9 | Yoo Jae-Jung (Hannara/1/Health) | 119.000 | 12.714 | Shin Sang-Jin (Hannara/2/Health) | 438.000 | 26.712 |
| 10 | Kang Myung-Soon (Hannara/1/Health) | 114.000 | 12.179 | An Hong-Jun (Hannara/2/Land) | 438.000 | 26.712 |
| 11 | Kang Suk-Ho (Hannara/1/Food) | 110.000 | 11.752 | Kang Myung-Soon (Hannara/1/Health) | 438.000 | 26.712 |
| 12 | Jang Kwang-Geun (Hannara/3/Land) | 100.000 | 10.684 | Na Sung-Lin (Hannara/1/Finance) | 440.000 | 26.591 |
| 13 | Park Dae-Hae (Hannara/1/ Administration) | 98.000 | 10.470 | Lee Ae-Joo (Hannara/1/ Health) | 441.000 | 26.531 |
| 14 | Kim Sung-Hoe (Hannara/1/ Knowledge) | 90.000 | 9.615 | Lee In-Ki (Hannara/3/ Administration) | 441.000 | 26.531 |

Table 4. (continued)

| Rank | Assemblymen (Party, No of election, Committee) | Degree Cen- trality | NrmDeg | Assemblymen (Party, No. of election, Committee) | Closeness Centrality | nClose- ness |
|------|--|---------------------------|--------|---|-------------------------|-----------------|
| 15 | Kong Sung-Jin (Hannara/2/Health) | 90.000 | 9.615 | Won Hee-Mok (Hannara/1/Health) | 443.000 | 26.411 |

1. Affiliated party, number of members elected, and affiliated committee are based on December 7, 2010 of the 18th (2008-2010) Assembly Members.
2. Ku Boon-Cheol, Kim Jong-Ryul, Song Young-Gil, Lee Kwang-Jae, Lee Dal-Gon, Lim Doo-Sung, Heo Bum-Do who lost their parliamentary seats as of December 7, 2010 will be on the basis of the information right before the time of their seat loss.
3. Only the highest ranked 15 assemblymen from each centrality index will be counted.
4. Words in parenthesis are sequentially listed as affiliated party, the number of members elected and affiliated committee.
5. Abbreviations of the affiliated committees are as follows. Finance (Strategy and Finance Committee), Foreign Affairs (Foreign Affairs, Trade and Unification Committee), Education (Education, Science and Technology Committee), Culture (Committee on Culture, Sports, Tourism, Broadcasting, and Communications), Food (Food, Agriculture, Forestry and Fisheries Committee), Knowledge (Knowledge Economy Committee), Labor (Environment and Labor Committee), Land (Land, Transport and Maritime Affairs Committee), Health (Health and Welfare Committee), Administration (Public Administration and Security Committee)

is a running committee for the National Pension Act, the National Health Insurance Act, and Act on Long-Term Care Insurance for the Elderly were seven which is almost half of them, but the other assemblymen who are affiliated with the Committee on Culture, Sports, Tourism, Broadcasting, and Communications, Foreign Affairs, Trade and Unification Committee, and the Land, Transport and Maritime Affairs Committee also participated in legislative activities. Conversely, assemblyman affiliated with the Environment and Labor Committee which deliberates the Industrial Accident Compensation Insurance Act and the Employment Insurance Act was just one which is quite contrary to the Health and Welfare Committee.

2) Closeness Centrality

Looking at the result of analysis on closeness centrality indicators, Lee Kyung-Jae who was elected four times at the Hannara Party and affiliated in Committee on Culture, Sports, Tourism, Broadcasting, and Communications appeared to have the highest standardized closeness centrality (27.529), the

Table 5. Centrality of 5 Social Insurance Legislations of the 18th Assembly: Betweenness Centrality, Prestige Centrality

| Rank | Assemblymen (Party, No of election, Committee) | Between- ness Centrality | nBetween- ness | Assemblymen (Party, No of election, Committee) | Prestige Centrality | nEige- nvec |
|------|--|--------------------------------|-------------------|--|------------------------|----------------|
| 1 | Chun Hye-Suk (Democratic/1/ Culture) | 941.721 | 13.877 | Sim Jae-Chul (Hannara/3/Culture) | 0.259 | 36.682 |
| 2 | Na Sung-Lin (Hannara/1/Finance) | 491.890 | 7.249 | Yoon Suk-Yong (Hannara/1/Health) | 0.255 | 36.100 |
| 3 | Lee Kyung-Jae (Hannara/4/Culture) | 488.817 | 7.203 | Lee Ae-Joo (Hannara/1/Health) | 0.252 | 35.601 |
| 4 | Kim Chung-Hwan (Hannara/2/Foreign Affairs) | 428.406 | 6.313 | Son Sook-Mi (Hannara/1/Health) | 0.248 | 35.048 |
| 5 | Yoo Sung-Yup (Independent/1/ Education) | 354.098 | 5.218 | An Hong-Jun (Hannara/2/Land) | 0.240 | 33.891 |
| 6 | Won Hee-Mok (Hannara/1/Health) | 351.992 | 5.187 | Yoo Jae-Joong (Hannara/1/Health) | 0.240 | 33.983 |
| 7 | An Hong-Jun (Hannara/2/Land) | 339.510 | 5.003 | Won Hee-Mok (Hannara/1/Health) | 0.238 | 33.666 |
| 8 | Lee Kwang-Jae (Democratic/2/ Finance) | 318.024 | 4.686 | An Sang-Su (Hannara/4/Foreign Affairs) | 0.237 | 33.500 |
| 9 | Sim Jae-Chul (Hannara/3/Culture) | 290.429 | 4.280 | Lee Jung-Sun (Hannara/1/Labor) | 0.232 | 32.853 |
| 10 | Baek Sung-Un (Hannara/1/Land) | 287.282 | 4.233 | Kang Myung-Soon (Hannara/1/Health) | 0.226 | 31.955 |
| 11 | Yang Seung-Jo (Democratic/1/ Health) | 234.711 | 3.459 | Kang Suk-Ho (Hannara/1/Food) | 0.218 | 30.797 |
| 12 | Choi Young-Hee (Democratic/1/ Health) | 216.345 | 3.188 | Park Bo-Hwan (Hannara/1/ Education) | 0.213 | 30.125 |
| 13 | Lee Hye-Hoon (Hannara/2/Finance) | 213.319 | 3.144 | Park Dae-Hae (Hannara/1/ Administration) | 0.206 | 29.147 |

Table 5. (continued)

| Rank | Assemblymen (Party, No of election, Committee) | Between- ness Centrality | nBetween- ness | Assemblymen (Party, No of election, Committee) | Prestige Centrality | nEige- nvec |
|------|--|--------------------------------|-------------------|--|------------------------|----------------|
| 14 | Lee Mi-Kyoung (Democratic/4/ Labor) | 209.370 | 3.085 | Kim Sung-Hoe (Hannara/1/ Knowledge) | 0.205 | 28.974 |
| 15 | An Sang-Su (Hannara/4/Foreign Affairs) | 202.090 | 2.978 | Kong Sung-Jin (Hannara/2/Health) | 0.205 | 28.974 |

so-called ‘closest person.’ In the same way as degree centrality, all consisted of Hannara Party assemblymen except one Democratic Party assemblyman. In other words, Hannara Party assemblymen were adjacent to the center of the network not only with directly connected other actors, but also with indirectly connected actors in the network. The first rank is four times election (Lee Kyung-Jae), second rank is three times election (Sim Jae-Chul), so that assemblymen elected more than three times rather than one time or two times scored a higher position. Furthermore, out of 15 assemblymen, five were affiliated with the Health and Welfare Committee and one with the Environment and Labor Committee.

Table 5 indicates the betweenness centrality and prestige centrality among the analysis on centrality of five social insurance legislations of the 18th assembly.

3) *Betweenness Centrality*

If we review the result of the betweenness centrality index, Chun Hye-Suk, a newly-elected Democratic Party assemblyman, and affiliated with the Committee on Culture, Sports, Tourism, Broadcasting, and Communications was outstanding in terms of betweenness centrality (941.721). The betweenness centrality of Chun Hye-Suk was twice as high as Na Sung-Lin’s (491.890) which ranks second. This is because Chun Hye-Suk representatively proposed two bills of the Act on Long-Term Care Insurance for the Elderly, and jointly submitted a bill with Democratic Party assemblymen as well as 15 Hannara Party assemblymen such as Sim Jae-Chul and An Sang-Su who have a high degree of centrality, closeness centrality, and prestige centrality.

Unlike the degree centrality and closeness centrality, the top 15 rank of the between centrality includes five Democratic Party assemblymen and one Independent assemblyman. They are considered as playing a 'bridge' role in the joint submission with the Hannara Party.

Moreover, it is worth noticing that the first rank (Chun Hye-Suk) and second rank (Na Sung-Lin) assemblymen are all newly-elected assemblymen, unlike the other centrality indicators. And out of 15 assemblymen, three are affiliated with Health and Welfare Committee, and only one with the Environment and Labor Committee.

4) Prestige Centrality

After calculating Bonacich's Eigenvector of prestige centrality, it is evident that Sim Jae-Chul, who was elected three times by the Hannara Party and affiliated with the Committee on Culture, Sports, Tourism, Broadcasting, and Communications, had the highest prestige centrality (.259). Therefore, Sim Jae-Chul is mostly likely connected with prestigious resources such as people, information, and power related to the social insurance legislations. The first rank was a man elected three times (Sim Jae-Chul), who placed higher than newly-elected assemblymen. In addition, within the 15 highest ranks, there were no Democratic Party assemblymen, and only Hannara Party assemblymen were located. Furthermore, out of 15 assemblymen, seven are affiliated with the Health and Welfare Committee, and none with the Environment and Labor Committee.

4. Network of Assemblyman x Bill of Five Social Insurance Legislations of the 18th Assembly

Next, Figure 2 and Figure 3 present the two-mode network of assemblyman and submitted bills of five social insurance legislations of the 18th Assembly. It is the visualization of assemblyman and bills of five social insurance legislations of the 18th assembly with two modes. The blue square is a bill and the red squares represent assemblymen.

Firstly, Figure 2 indicates the assemblymen who participated in one legislation at least out of five social insurance legislations, and it is noticeable that the assemblymen who participated in more than two bills are not located

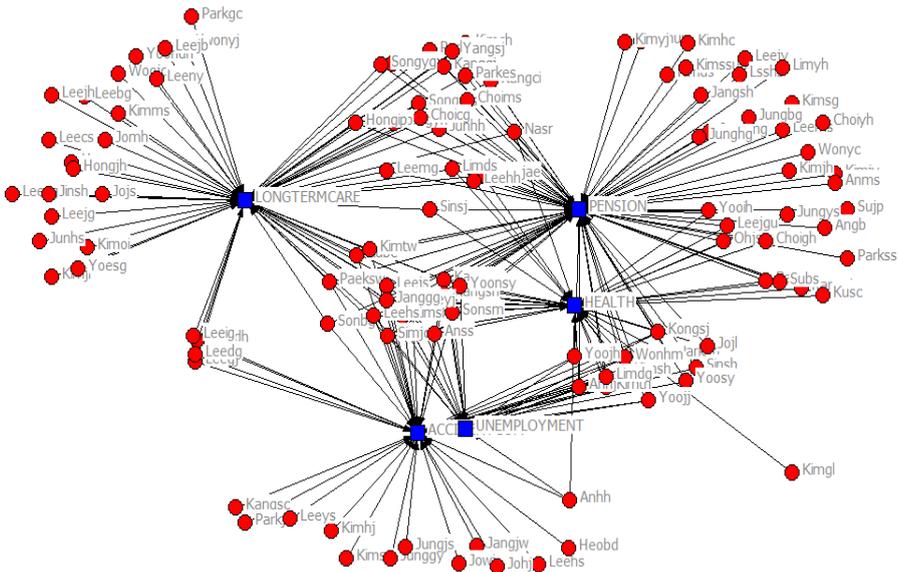


Figure 2. Network of Assemblyman x Bill of Five Social Insurance Legislations of the 18th Assembly

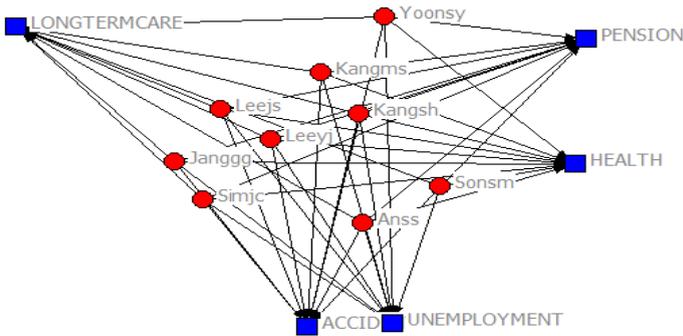


Figure 3. Network of Assemblyman x Bill of Five Social Insurance Legislations of 18th Assembly; node 1-4 delete

at the border line, but in the center with a cluster. Based on Figure 3, nine assemblymen, for instance, Kang Myung-Soon (Hannara/1/Health), Kang Suk-Ho (Hannara/1/Food), Sohn Sook-Mi (Hannara/1/Health), Sim Jae-Chul (Hannara/3/Culture), An Sang-Su (Hannara/4/Foreign Affairs), Yoon

Suk-Yong (Hannara/1/Health), Lee Ae-Joo (Hannara/1/Health), Lee Jung-Sun (Hannara/1/Labor), and Jang Kwang-Geun (Hannara/3/Land), submitted bills for all five social insurance legislations of the 18th Assembly.

Overall, it is possible to comprehend the following attributes after analyzing submission actions and the network of assemblymen during the five social insurance legislative processes of the 18th assembly.

1) Ruling Party Effect

To begin with, ‘Hannara Party’ which represents the conservative party, took the lead on the social insurance legislations of the 18th assembly. That is, as a result of analyzing the network by centrality index in relation to the five social insurance legislations of the 18th assembly, the ‘ruling party’ effect dominated the network.

The first rationale behind this is that the Hannara Party took first place in all centrality indices (degree centrality, closeness centrality, prestige centrality) except betweenness centrality. Secondly, only Sim Jae-Chul, An Sang-Su, and An Hong-Jun were included within the top 15 rankings in four kinds of centrality indices, and they are all affiliated with the Hannara Party. Thirdly, looking at the network of assemblyman x bill, nine assemblymen such as Kang Myung-Soon, Kang Suk-Ho, Son Sook-Mi, Sim Jae-Chul, An Sang-Su, Yoon Suk-Yong, Lee Ae-Joo, Lee Jung-Sun, and Jang Kwang-Geun proposed all five social insurance bills, and they are all Hannara Party assemblymen as well.

Based on Table 3, we confirmed that the percentage of seats of the 18th assembly are held by the Hannara Party (57.2%) and the Democratic Party (29.4%), which means the Democratic Party is inferior, but when we look at the ratio of social insurance legislative assemblymen compared to the number of members, the Hannara Party holds 45.6% and the Democratic Party holds 42.5%, which is a similar level. In other words, even though the number of Democratic Party assemblymen is small, they participated in the social insurance legislations to the same extent as the Hannara Party. However, the Democratic Party could not exhibit the initiative in the social insurance legislations according to the centrality indicators.

Nevertheless, it is necessary to judge this result in terms of whether the ideological characteristics of conservatism over liberalism or the position

of the party of the ruling party or opposition party. According to B.K. Lee and Y.S. Yeom (2009)'s research, which investigated the network of bill submissions of the 17th assembly targeting the Health and Welfare Committee, they insisted on the 'ruling party effect' which means that at that moment the ruling party (Uri Party: liberal) intensively proposed a bill and were asked to propose a lot more than the opposition party (Hannara Party: conservative). In other words, whether a party is the ruling party or not is a more vital factor than ideology (conservative vs. liberal vs. progressive) in terms of the main actors of social welfare related legislations. Surely the purpose of research (main 'actors' attributes' vs. structural characteristics of network) and objects of research (network of 'social insurance' related bills versus . network of bills proposed by the 'Health and Welfare Committee') are different, but it would be a moderate interpretation that the 18th assembly was influenced more by the ruling party effect than ideology, like the 17th assembly.

2) *Seniority Effect*

The secondary attribute of the main actors is the 'seniority' effect. Senior assemblymen took a higher position in the centrality index than newly-elected assemblymen and those elected two times. First place of degree centrality was the assemblyman elected three times (Sim Jae-Chul), second place was the assemblyman elected four times (An Sang-Su), and the first place of closeness centrality was the assemblyman one elected four times (Lee Kyung-Jae), second place was the assemblyman elected three times (Sim Jae-Chul), and the first place of prestige centrality was the assemblyman elected three times (Sim Jae-Chul). That is, senior assemblymen were more highly placed than newly-elected assemblymen in all centrality indicators except betweenness centrality.

Based on Table 3, we identified that the proportion of assemblymen of social insurance legislation compared to the numbers of members elected are 50.3% for newly-elected assemblymen, which is the highest, and two times 33.8%, three times 31.0%, and four times 30.0%. Even though the assemblymen elected three times or four times showed a lower level of social insurance bill proposals than newly-elected assemblymen and two times, the most dominating actions were performed by the senior assemblymen. Burkett and Skvoretz (2001) claimed that 'seniority' effect will fade away when

considering ‘the number of assemblymen representatively proposing a bill’, but it is necessary to demonstrate this relationship by integrating multiple regression analysis in the future.

3) *Weak Standing Committee Effect*

The third attribute of the main actors is that it is regretful that the Health and Welfare Committee and Environment and Labor Committee as social insurance related committees failed to take a leading role. In other words, the ‘standing committee effect’ is deficient. Relevant committees fell behind the Committee on Culture, Sports, Tourism, Broadcasting, and Communications and Foreign Affairs, Trade and Unification Committee at the degree centrality, and lagged behind by the Committee on Culture, Sports, Tourism, Broadcasting, and Communications, Foreign Affairs, Trade and Unification Committee, and the Land, Transport and Maritime Affairs Committee in terms of closeness centrality. In addition, they are lowly posed than the Committee on Culture, Sports, Tourism, Broadcasting, and Communications, Strategy and Finance Committee, Foreign Affairs, Trade and Unification Committee, and Education, Science and Technology Committee in terms of the betweenness centrality, and also lower than the Committee on Culture, Sports, Tourism, Broadcasting, and Communications in terms of prestige centrality. Especially the Environment and Labor Committee showed less initiative compared to the Health and Welfare Committee.

We have identified that the percentage of assemblymen who participated in social insurance legislation compared to committees is that Health and Welfare Committee was the highest at 66.7%, and the Environment and Labor Committee was the second-highest at 53.8%, which is outlined in Table 3. Nevertheless, the reason that those committees lack initiative more than other committees is that the Health and Welfare Committee and Environment and the Labor Committee are less important than other committees. It is plausible that relevant committees could not have a leading authority in the social insurance legislations because these committees had less significance than other committees so that senior assemblymen or core assemblymen in the respective party were participating in other committees. It is difficult to identify studies on seniority effect in previous research. It is feasible that prior studies were targeting all the bills submitted by specific standing committees

as objects of research. For the reliability of this research, it is necessary to add follow-up studies which target bills rather than committees, as this study has.

V. CONCLUSION AND SUGGESTIONS

This study departed from the problem recognition of searching for the main actions and actors beyond welfare attitudes and welfare perceptions in studies of Korea's welfare politics. We have explored who indeed leads welfare politics and what are the attributes of such power. To achieve this, by using the Social Network Analysis method, we have examined the network related to five social insurance legislations of the 18th assembly (2008-2010) through the 'legislation information system' in the National Assembly of the Republic of Korea.

Reflecting the two research questions of this study, the main research findings are as follows.

First, there were 11 legislations, 23 joint broacher groups and 118 (the total number of assemblymen was 298 as of December 7, 2010, 39.9%) members of the National Assembly related to the five social insurance of the 18th assembly. Upon reviewing the entire network of the assemblyman x assemblyman of five social insurance legislations of the 18th assembly, it appears that joint submissions with other assemblymen are present with a dense network out of the joint broacher groups. Second, Sim Jae-Chul is recognized as the main actor in the five social insurance legislations due to the highest position in terms of degree centrality and prestige centrality. In addition, both Lee Kyung-Jae and Chun Hye-Suk are placed at the highest position in terms of closeness centrality and betweenness centrality respectively, so that they can be evaluated as 'closest person' and 'broker, bridge, matchmaker'. Moreover, it is noticeable that Sim Jae-Chul, An Sang-Su, and An Hong-Jun are all included in the top 15 ranking in terms of the four centrality indicators. Third, looking at the network of assemblyman x bill of the five social insurance legislations of the 18th assembly, nine assemblymen such as Kang Myung-Soon, Kang Suk-Ho, Son Sook-Mi, Sim Jae-Chul, An Sang-Su, Yoon Suk-Yong, Lee Ae-Joo, Lee Jung-Sun, and Jang Kwang-Geun submitted all five social insurance legislations. They are all included in the top

15 rankings in terms of degree centrality, and actively participated in the five social insurance legislations.

Based on these findings, there are some attributes of the main actors. The first attribute is ‘ruling party effect’, which means the ruling party dominates the network of the social insurance legislations. In other words, the Hannara Party as the ruling party of the 18th assembly took the lead in social insurance legislations and this is more of a ‘ruling party’ effect than ideology (conservative vs. liberal vs. progressive). The second attribute is ‘seniority’. Senior assemblymen are three or four times more likely than newly-elected or assemblymen elected twice to hold a higher position in the network of social insurance legislations. The third attribute is that the ‘standing committee effect’ is not significant. Combining these attributes, attributes of the main actors of the five social insurance legislations are the assemblymen who are re-elected three or four times by the Hannara Party, not affiliated with the Health and Welfare Committee or the Environment and Labor Committee. However, this combination of attributes can be paradoxically evaluated in that newly-elected assemblymen at the ruling party are affiliated with the Health and the Welfare Committee or the Environment and Labor Committee. That is, Korea’s welfare politics have the characteristic that assemblymen elected three or four times who have established basis at parties than the newly-elected or two times elected assemblymen affiliated with the standing committees (the Health and Welfare Committee or the Environment and Labor Committee) prefer Foreign Affairs, Trade and Unification Committee or the Committee on Culture, Sports, Tourism, Broadcasting, and Communications.

Various follow-up studies are required due to the following limitations. First, since this paper is restricted to five social insurance legislations, it could not explain the legislations of other social welfare institutions. In the future, it will be necessary to examine the bills representatively submitted by progressive parties, such as bills related to the disabled, labor, education, housing, and disadvantaged classes. Second, it was impossible to explore changes in terms of time sequence by only including three years of the 18th assembly. For future studies, it is pivotal to investigate the change of the 16th and 17th assembly, which is considered as the initial, developmental period of the welfare state.

Third, undertaking an analysis of the bill's details and discourse analysis of the legislation formation process and discussion process is necessary. This is because in spite of social network analysis relying on quantitative methods, it is still difficult to undertake an analysis of the bill and discourse analysis of the bill submitting process, discussion process, and deliberative process of the assembly. In other words, it will be possible to draw a more meaningful conclusion if the network analysis is undertaken after analyzing the characteristics of welfare politics to understand whether the present welfare reform process is regressing, remaining static or progressing. Fourth, social organizations among the interest groups around the bills could not be identified as a main actor. Representing the whole network of interest by constructing relevant data is indispensable because processing a bill involves not only inside assemblymen but also outside interest groups.

Despite these shortcomings, this paper is significant in that it has contributed to an expansion of welfare politics and its scope in terms of perceptions of welfare and research on attitudes to actual actions (bill proposal) and actors (proposing assemblymen). Next, beyond the unified analysis tool in welfare politic studies, it examined the bills and assemblymen representing the attributes of welfare capitalism's parliamentary politics by using the proper analytic tool for social networks, which fits the research purpose. Especially, it is a critical attempt to try something new in welfare politics research by exploring the network of actions and actors with one-mode and two-mode networks respectively, and comprehended the network of Korea's welfare politics and its attributes through various centrality analyses.

REFERENCES

Books and Articles in Korean

- Ahn, Byung-Young. 2000. "Research on the Establishment Process of the National Basic Livelihood Security Act." *Korean Journal of Public Administration* 38 (1): 1-50 ("국민기초생활보장법의 제정과정에 관한 연구." 『행정논총』 제38권 1호).
- Ahn, Chi-Min. 1995. "Social Welfare, Awareness, and Class." *Korea University*

- Sociology* 9: 211-228 (“사회복지에 대한 의식과 계급.” 『고려사회학논집』 제9권).
- Ahn, Sang-Hoon. 2000a. “Research on the Sociological Fissure Structures of Welfare Politics: The Limitations of Class Theory and a New Analytical Framework.” *Korean Academy of Social Welfare* 43 (4): 193-221 (“복지정치의 사회적 균열구조에 관한 연구: 계급론의 한계와 새로운 분석틀.” 『한국사회복지학』 제43권 4호).
- _____. 2000b. “Mechanism of Welfare Politics and Non-hierarchical Fissure Structure.” *Social Welfare Studies* 16 (4): 87-115 (“복지정치의 메커니즘과 비계급적 균열구조: 복지권과 복지의무에 기초한 세 가지 지위차원의 이론적·경험적 검토.” 『사회복지연구』 제16권 4호).
- _____. 2002. “Dilution of Class Politics and Defense Mechanism of the Welfare State: Some Macro Evidence for Welfare Status Model.” *Social Welfare Studies* 19 (1): 159-180 (“계급정치의 희석과 복지국가의 대안적 방어기제: 복지 지위모형에 대한 거시적 증거를 중심으로.” 『사회복지연구』 제19권 1호).
- _____. 2003. “Comparative Political Sociological Study on the Welfare Status Fissure of the Pro-Welfare Alliance: Sweden’s Experience and Korea’s Experiment.” *Social Welfare Studies* 21 (1): 79-104 (“친복지동맹의 복지 지위 균열에 관한 정치사회학적 비교연구: 스웨덴의 경험과 한국의 실험.” 『사회복지연구』 제21권 1호).
- Baek, Seung-Ho. 2002. “An Analysis of the Unified Integrated Health Care Decision-making Process: A Focus on the Role of the Korean Confederation of Trade Unions.” Master’s thesis. Seoul National University (“의료보험 통합일원화 정책결정과정 분석: 민주노총의 역할을 중심으로”).
- Choi, Jung-Won. 2004. “Legislative Proposal Institution and Political Dynamics of the Congressional Legislative Process.” *Proceedings of Korean Political Science Association* 180-215 (“법안발의 제도와 국회 입법과정의 정치역학.” 한국정치학회 자료집).
- Choi, Kyun, and Jin-Seok Ryu. 2000. “Trends and Characteristics of Welfare Consciousness: Duality.” *Social Welfare Studies* 16: 223-254 (“복지의식의 경향과 특징: 이중성.” 『사회복지연구』 제16권).
- Han, Chang-Geun. 2001. “Analysis of the Response of Welfare Policy Participants following Political Flow: A Focus on the Enactment of the National Basic Livelihood Security Act.” Master’s thesis. Seoul National University (“정치 흐름에 따른 복지정책 참여자들의 대응에 관한 분석: 국민기초생활보장법의 제정과정을 중심으로”).
- Hong, Kyung-Joon, and Ho-Geun Song. 2005. “Network Analysis of the Decision-making Structure of Social Welfare Policy: Comparison between

- Civilian Government and National Government.” *Korean Academy of Social Welfare* 57 (4): 5-34 (“사회복지정책 결정구조에 대한 정책 연결망 분석: 문민 정부와 국민의 정부 비교.” 『한국사회복지학』 제57권 4호).
- Hyun, Wae-Sung. 2008. “Welfare Political Analysis of National Pension Reform.” *Senior Welfare Studies* 41 (3): 353-384 (“국민연금개혁의 복지정치분석.” 『노인복지연구』 제41권 3호).
- Joo, Eun-Sun, and Jung-Mi Baek. 2007. “Topography of Korea’s Welfare Consciousness: A Focus on the Influence of Class, Welfare Needs, and Public Welfare Supply Experience.” *Social Welfare Studies* 34 (3): 203-225 (“한국의 복지인식 지형: 계층, 복지수요, 공공복지 수급경험의 영향을 중심으로.” 『사회복지연구』 제34권 3호).
- Jung, Jae-Hwang. 2003. “Special Feature: Evaluation and Legislative Assessment of the Second Half of the 16th National Assembly.” *Legislative Research* 16: 27-56 (“특집: 제16대 국회 하반기 평가, 법안심사.” 『의정연구』 제16권).
- Kim, Hee-Ja. 1999. “Differentiation in the Welfare Attitude of Koreans.” *Social Welfare Policy* 8: 106-124 (“한국인의 복지태도 분화.” 『사회복지정책』 제8호).
- Kim, Ran-Woo. 2009. “A Study on the Influence of Political Networks Revealed from Legislative Voting Behavior: A Focus on South Korea’s 17th National Assembly.” Proceedings from Korean Sociological Association International Conference on Sociology (“법안투표행태에서 드러난 정치 네트워크 영향력 연구: 대한민국 17대 국회의 사례를 중심으로”).
- Kim, Sang-Kyun, and Won-Oh Jung. 1995. “A Study on the Welfare Consciousness of Koreans in the 90s.” *Korean Academy of Social Welfare* 25 (1): 1-33 (“90년대 한국인의 복지의식에 관한 연구.” 『한국사회복지학』 제25권 1호).
- Kim, Shin-Young. 2010. “A Study on the Factors Determining the Welfare Consciousness of Koreans: A Focus on the State’s Attitude on Public Responsibility.” *Survey Research* 11 (1): 87-105 (“한국인의 복지의식 결정요인 연구: 국가의 공적책임에 대한 태도를 중심으로.” 『조사연구』 제11권 1호).
- Kim, Yong-Hak. 2007. *Social Network Analysis*. Revised ed. Pakyoungsa (『사회연결망 분석』).
- Kim, Young-Mo. 1986. “Problems of Korean Social Welfare.” Korea Institute for Welfare Policy (“한국 사회복지의 제 문제”).
- _____. 1991. “A Review of the Welfare Consciousness of Koreans.” *Social Policy Research* 13: 5-17 (“한국인의 복지의식 재론.” 『사회정책연구』 제13호).
- Kwon, Hyuk-Shin. 2000. “A Study on Decision-making Factors and Rationality: A Focus on the National Pension Policy.” Master’s thesis. Korea University (“정책결정요인과 합리성에 관한 연구: 국민연금정책 사례를 중심으로”).

- Lee, Byung-Kyu, and Yoo-Shik Yeom. 2009. "Mechanism Analysis on the Network Formation of Joint Initiatives between Members of the 17th National Assembly." *Korean Sociological Association Sociological Conference Theses Collection 2: 1337-1353* ("17대 국회의원들 간 공동발의 연결망 형성의 메커니즘 분석." 한국사회학회 사회학대회 논문집 2).
- _____. 2009. "Intermediary Role Maintenance System: Through a Network Analysis of the Legislative Motions of the 17th National Assembly." *Sourcebook from Korean Sociological Association 2009 First Half Conference on Sociology* ("중개자 역할의 유지 메커니즘: 17대 국회 법안발의 연결망 분석을 통하여").
- Lee, Hyun-Chool. 2009. "Analysis of the Proposed Legislation of the 17th National Assembly: Initiative, Content, Deliberation Results." *Korea Political Party Study Review* 8 (1): 255-283 ("17대 국회 의원입법안 분석: 발의, 내용, 심의결과." 『한국정당학회보』 제8권 1호).
- Lee, Hyun-Woo. 2011. "An Analysis Regarding the Network Pattern of Joint Submission in the National Assembly Standing Committee: Focusing on the Bills by the 18th CCSTBC." *Broadcasting and Telecommunication Review* 74: 99-131 ("국회 상임위원회의 법안 공동발의 연결망 분석: 18대 문방위 발의안을 중심으로." 『방송통신연구』 제74권).
- Lee, Joong-Sup. 2009. "Research on the Factors Influencing the Welfare Consciousness of Koreans." *Social Welfare Policy* 36 (4): 73-99 ("한국인의 복지의식에 영향을 미치는 요인에 관한 연구." 『사회복지정책』 제36권 4호).
- Lee, Sung-Kyun. 2002. "The Nature and Determining Factors of the Welfare Consciousness of Korean Society: A Focus on the Approval Ratings of the State's Welfare Responsibility." *Korean Sociology* 36 (2): 205-228 ("한국사회 복지의식의 특성과 결정요인: 국가의 복지책임 지지도를 중심으로." 『한국사회학』 제36권 2호).
- Park, Yoon-Young. 2002. "A Study on the Establishment Process of the National Basic Livelihood Security Act." *Korean Academy of Social Welfare* 49: 264-95 ("국민기초생활보장법 제정과정에 관한 연구." 『한국사회복지학』 제49권).
- Ryu, Jin-Seok. 2004. "Micro Determinant Structure and Characteristics of Welfare Attitudes." *Korean Academy of Social Welfare* 56 (4): 79-101 ("복지태도의 미시적 결정구조와 특성." 『한국사회복지학』 제56권 4호).
- Sohn, Byung-Kwon. 2004. "Legislative Activity Assessment of Newly-elected Members of the 17th National Assembly." *Legislative Research* 10 (2): 85-107 ("17대 초선의원들의 의정활동 평가." 『의정연구』 제10권 2호).
- The National Assembly of the Republic of Korea. 2010. <http://likms.assembly>.

go.kr/bill/jsp/main.jsp.

- Yeom, Yoo-Shik. 2007. "Network Analysis on the Bills Passed by Health and Welfare Committee of the 16th National Assembly: The Effect of Intermediary Role of Legislators on Bill Approval." *Law and Society* 32: 159-184 ("16대 국회 보건복지위원회의 법안 가결에 관한 연결망 분석: 의원들의 중개자 역할이 법안 가결여부에 미치는 영향." 『법과 사회』 제32권).
- Yoon, Jin-Hoon. 1997. "Research on the Decision-making Process of Korea's Unemployment Insurance Policy." Master's thesis. Joongang University ("한국의 고용보험정책 결정과정에 관한 연구").

Books and Articles in English

- Burkett, T., and J. Skvoretz. 2001. "Political support networks among US senators: stability and change from 1973 to 1990." Unpublished manuscript. College of Charleston.
- Cho, W.K.T., and J.H. Fowler. 2007. "Legislative Success in a Small World." Available at SSRN: <http://ssrn.com/abstract>, vol. 1007996.
- Epstein D., J. Fowler, and S. O'Halloran. 2007. "Co-Sponsorship Networks of Minority-Supported Legislation in the House." Presented at the annual meeting of the Midwest Political Science Association. Palmer House Hotel, Chicago. http://www.allacademic.com/meta/p198504_index.html.
- Fowler, J. H. 2006a. "Connecting the Congress: A study of cosponsorship networks." *Political Analysis* 14: 456.
- _____. 2006b. "Legislative cosponsorship networks in the US House and Senate." *Social Networks*, 28: 454-465.
- Gross, J. H., and C. Shalizi. 2008. "Cosponsorship in the US Senate: A Multi-level Approach to Detecting the Subtle influence of social relational factors on legislative behavior." Unpublished working paper. Department of Statistics. Carnegie Mellon University.
- Marshall, T. H. 1950. "Citizenship and social class." Cambridge: Cambridge University Press.
- Palme, J. 1990. *Pension Rights in Welfare Capitalism*. Edsbruk: Akademitryck AB.
- Svallfors, S. 1995. "The end of class politics? Structural cleavages and attitudes to Swedish welfare politics." *Acta Sociologica* 38: 53-74.
- Woon, J. 2008. "Bill Sponsorship in Congress: The Moderating Effect of Agenda positions on legislative proposals." *The Journal of Politics* 70: 201-216.
- Zhang, Yen et al. 2008. "Community structure in Congressional cosponsorship networks." *Physica A* 387: 1705-1712.