

Articles

# The Policy Networks of the Korean International Migration Policy: Using Social Network Analysis

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This research adds value to the extant international migration policy studies by placing a greater focus on the ‘processes’ of the Korean international migration policy changes. Specifically, this study pays special attention to policy networks in the process of adopting the Employment Permit System for Foreigners (EPSF), one of the most important policy changes in Korean international migration policy history. On the basis of the Advocacy Coalition Framework, this research examines the policy network structure that describes the relationships between policy actors at network levels. The results found that the communication network is more hierarchical than the relational network at the global network level, a government-led advocacy coalition was influential in advocating EPSF at the coalition network, and the coordinating role of policy actors such as Office for Government Policy Coordination and New Millennium Democratic Party was significant in the policy process at the egocentric network level.

## Introduction

With the advancement of globalization, the issue of international migration has become a prominent issue (Klingner & Hugill, 2008; SOPEMI, 1999; Zolberg, 2006). Many developed countries receive foreign workers as an instrument for addressing labor shortages that can be detrimental to economic growth. Conversely, a great number of developing countries have shown a growing interest in sending unemployed workers abroad due to their stagnant economies. This phenomenon is reflected in international migration statistics. For example, the number of persons who live outside their country of birth doubled between 1975 and 2000 (Meyers, 2004). Also, the number of worldwide international migrants totaled 232 million in 2013, which is 154 million more than in 1990 (United Nations, 2013).

South Korea (henceforth, “Korea”) is not an exception to this international migration trend. During the 1960s and 1970s, Korea sent workers to developed countries, such as West Germany and the Middle East. However, rapid economic growth in Korea caused dramatic changes in becoming a net recipient of international migration. Since the late 1980s, Korea experienced an influx of foreign workers, largely due to its labor shortage.

Studies on international migration, including international migration policy, have been abundant in the West (Akbari & MacDonald, 2014; Meyers, 2004; Tichenor, 2002; Zolberg, 2006). However, most studies focused on the “policy contents” of a specific country or across a set of coun-

tries. It is very rare to find studies on “policy processes,” particularly based on empirical data.

This research focuses on the process of Korean international migration policy. In particular, this research pays special attention to policy networks in the process of adopting the *Employment Permit System for Foreigners* (EPSF) during the early 2000s. As many scholars have shown, the adoption of the EPSF was the biggest policy change in Korean international migration policy history (Kim, 2009; Ko & Lee, 2004; Yoo et al., 2017).

To understand the process of Korean international migration policy, this research uses social network analysis (SNA) to map the policy network structure that describes the relationships between policy actors. In this research, we focus on two types of policy networks in the policy process: (1) the communication network that examines the existence and frequency of confidential communication between policy actors, and (2) the ally network that evaluates the mode of relationship between policy actors associated with the level of cooperation or conflict. Research results can contribute to enhancing our understanding of the policy process by visualizing the interdependence among policy actors that defines a network structure. It contributes to the advocacy coalition framework that is criticized for ignoring and underestimating the importance of addressing the mechanisms of the policy process.

## Advocacy Coalition Framework

This research pays special attention to the Advocacy

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Coalition Framework (ACF), which explains policy changes and learning within a policy subsystem, typically over a decade or longer timeframe. Sabatier first introduced this framework in 1988. Since then, hundreds of research papers have employed this framework (Weible et al., 2019). Focusing mainly on policy changes over a decade or longer, the ACF emphasizes the interaction among competing coalitions in a policy subsystem. More specifically, the ACF suggests four prominent paths to policy change: (1) *policy-oriented learning* based on scientific and technical information; (2) *changes in external events (systems)*, such as socioeconomic conditions, public opinion, systemic governing coalitions, as well as policy decisions and impacts from other subsystems; (3) *internal shocks* such as disasters that have occurred from within a policy subsystem; and (4) *negotiated agreements* emerging under such circumstances as a hurting stalemate (Lee, 2011; Sabatier & Jenkins-Smith, 1999; Sabatier & Weible, 2007).

Although the ACF may be useful in describing policy change after the fact, it lacks the ability to pinpoint when policy changes actually take place or how advocacy coalitions develop (Zahariadis, 1995). Sabatier & Jenkins-Smith (1999) maintain that policy learning resulting from previous implementation experiences were effective tools to change the secondary beliefs affecting instrumental decisions necessary to implement specific policy issues. However, the ACF cannot explain what kinds of environmental changes are critical for a specific policy change or how these changes influence policy outcomes. As a result, the ACF is criticized for discarding the core mechanisms of policy changes into a “black box” (Cairney, 1997; Sato, 1999).

Along with the ACF, network approaches are based on institutionalism (Blom-Hansen, 1997; Scharpf, 1997). The most systematic framework in this research line is Scharpf’s (1997) Actor-Centered Institutionalism Framework (ACIF), in which the modes of interaction in a network are greatly influenced by institutional settings. The ACIF has strengthened its analytical power by combining institutional settings with various modes of interaction. Also, the concept of actor constellations based on game theories suggests that the complicated policy environments may be simplified and systemized, thereby facilitating the effective analysis of the policy process. At the same time, however, the framework faces some criticism. Above all, the ACIF has limits in explaining the changes in institutions. As the ACIF assumes that institutional settings are given and that they determine the trajectories of policy actors and their interactions, the roles of policy actors as intriguers or policy entrepreneurs of changes in institutions are disregarded in the ACIF.

It is noteworthy that scholars have focused on policy network structures, either to compare the structures across nations and policy areas or to examine the effects of differences in network structures on policy outcomes and the selection of policy instruments (Bressers & O’Toole, 1998; Howlett, 2002; Knoke et al., 1996; Schneider, 1992). Inter-organizational approaches to policy networks have sought to detail the effects of network structures on policymaking by focusing on the interrelations and interdependence among policy actors (Scharpf, 1997; Schneider, 1992). Scharpf (1997), for example, argued that the major tasks of inter-organizational policy studies lie in elucidating the ob-

jective need for specific types of inter-organizational coordination with reference to the requirements of a particular type of policy within the constraints of a particular decision structure.

These researchers showed the usefulness of network attributes in understanding the policy process by addressing the relationships between structural attributes of policy networks—such as inter-connectedness and cohesion—and the selection of policy instruments. In this light, ego networks can be useful for policy researchers to understand social relations describing who is directly connected to whom. Brokerage in the network shows the diverse roles of an actor who has ties between two other actors (Hanneman & Riddle, 2005), and structural holes identify the constraints and opportunities present regarding the embeddedness of an actor in a network (Burt, 1992). As such, this research examines the actors’ roles in the policy processes by network variables such as density, centrality, betweenness, and closeness. We hypothesize that actors with high scores in density, centrality, betweenness, and closeness are apt to play pivotal roles in policy processes.

## **The Korean International Migration Policy Between 1989 and 2003**

In the midst of policy controversy around importing unskilled foreign labor, three major migration policy programs were introduced since the late 1980s, including the Industrial Training System for Foreigners (ITSF), the Working after Training Program for Foreigners (WTPF), and the Employment Permit System for Foreigners (EPSF) (Ko & Lee, 2004; Yoo et al., 2017).

### **The first round of migration policy changes between 1989 and 1991: ITSF**

The ITSF was the first policy program adopted under the Immigration Control Act in November 1991. The program was designed to satisfy the growing domestic demands of small and medium businesses for unskilled foreign workers. However, many problems emerged after the ITSF was implemented. First, the ITSF was officially a vocational training program, not an official immigration program for foreign workers. Under this program, foreign workers were not protected by labor laws because they were not workers in a legal sense but industrial trainees. Foreign workers had to leave after a certain period of training without the option of permanent settlement. Second, related to the first problem, this “non-immigrant policy” ironically precipitated a rapid increase in the illegal stay of unskilled foreign workers. For example, a year after the program, the number of undocumented workers increased by approximately 64% (Ministry of Justice, 2003).

### **The second round of migration policy change between 1994-1998: WTPF**

Problems with the ITSF facilitated the search for policy ideas, among which the EPSF was viewed as the most viable option (Kim, 2009; Ko & Lee, 2004). Policy ideas were initially proposed between 1995 and 1997. However, this pro-

**Table 1. Comparison of the ITSF and the EPSF**

| Dimension                       | ITSF   | EPSF   |
|---------------------------------|--|--|
| Adopted Time                    | November 1991  | August 2003  |
| Relevant Act                    | Immigration Control Act  | Act on the Foreign Workers Employment, etc   |
| Relevant Authority              | Ministry of Justice Committee on Foreign Industrial Labor Policy <sup>a</sup> (Small and Medium Business Administration) | Ministry of Labor Committee on Foreign Labor Policy (Established in Office for Government Policy Coordination) |
| Supporting Groups               | Business Associations Ministries for Industry and Small business   | NGOs for human rights Ministry of Labor  |
| Labor Rights of Foreign Workers | Not protected by labor law   | Protected by labor law   |
| Visa Status of Foreign Workers  | Industrial Trainee (D-3)   | Non-professional Employment (E-9)  |
| Maximum Length of Sojourn       | One year (in 1991) Two years (from 1993) Three years (from 1996)   | Three years  |

<sup>a</sup>The Committee on Foreign Industrial Labor Policy was abolished in August 2004. The Committee on Foreign Labor Policy established by the *Act on the Foreign Workers Employment* replaced its function.

posed policy failed due to heavy opposition from many small business owners and their associations. This is largely because the labor rights of the proposed policy included minimum wage and labor standards (e.g., working hours, holidays) that would result in increasing the cost of hiring workers. After the failure of the first trial of the EPSF between 1995 and 1997, the WTPF was proposed and adopted in November 1997. It was the first official program that allowed the migration of unskilled foreign workers. Under its provisions, foreign industrial trainees who passed certain skill tests after their two-year training period could stay in Korea as legal workers for one additional year. For this program, a new visa, working after training (E-8), was introduced (Yoo et al., 2017).

### The third round of migration policy change between 2000 and 2003: EPSF

Following the presidential election in 2002, another round of policy debate was launched. During the 2002 presidential election campaign, both the New Millennium Democracy Party (NMDP) and the Grand National Party (GNP), the two major political parties in Korea at that time, made a public promise to reintroduce the EPSF initially proposed between 1995 and 1997 (Huh, 2004; Ko & Lee, 2004). The victory of the ruling party in the presidential election made it possible to adopt the EPSF, under which the government sets a limit to the total quantity of unskilled foreign workers. This decision was based on the prevailing labor shortage, and employers could employ eligible unskilled foreign workers according to the due legal process.

The process of adopting the EPSF was complicated by two parties (Kim, 2009; Yoo et al., 2017). At the center of the debate was the issue of improving foreign workers' labor rights. On the proponent side were the Office for the Gov-

ernment Policy Coordination (OGPC), the Ministry of Labor (MOL), and the National Human Rights Committee (NHRC); on the opposition side stood five major business associations, including the Korean Federation of Small Businesses (KFSB).

To address this situation, the OGPC established a task force for the improvement of the foreign labor management system in December 2002. In the following month, the MOL announced that it would make efforts to adopt the EPSF and enforce it starting in 2004. Also, in February 2003, the NHRC recommended to the Chairman of the Korean National Assembly and the Prime Minister that they should adopt the EPSF to improve the human rights of foreign workers.

However, many policy actors still opposed the EPSF. For example, in February 2003, five major business associations officially made a proclamation to defeat the adoption of the EPSF; in particular, the Korean Federation of Small Businesses (KFSB) showed strong opposition to the EPSF by presenting a petition to the National Assembly.

To forge a compromise between the two sides, the NMDP, the ruling party, hosted a conference on improving the foreign labor management system in March 2003. Also, the National Assembly Environment and Labor Committee (NAELC) hosted a public hearing on the Foreign Workers' Employment and Management bill introduced by thirty-three members of the National Assembly on April 17, 2003. However, these efforts only confirmed the differences between the two conflicting coalitions, making it difficult for the NAELC to pass the bill.

Before voting on the bill, the major political parties had to decide their positions. The ruling NMDP had a comparatively favorable position to the adoption of the EPSF, but as it was not a majority party in the Korean Assembly at that time, the NMDP was forced to negotiate with the opposi-

**Table 2. Key Policy Actors in the Korean International Migration Policy**

| SECTOR                      | POLICY ACTOR   |
|-----------------------------|--|
| The Executive (8)           | Korean Office of the President (KOP) The Office for Government Policy Coordination (OGPC) Ministry of Justice (MOJ) Ministry of Labor (MOL) Ministry of Commerce, Industry and Energy (MOCIE) Ministry of Finance and Economy (MOFE) Small and Medium Business Administration (SMBA) National Human Rights Commission (NHRC) |
| National Assembly (2)       | National Assembly Environment and Labor Committee (NAELC) National Assembly Commerce, Industry and Energy Committee (NACIEC)   |
| Political Party (2)         | New Millennium Democratic Party (NMDP) Grand National Party (GNP)  |
| Public Interest Group (2)   | Korean Joint Committee for Migrant Workers (KJCMW) Korean Joint Committee for measures against forced expulsion of foreign workers, of abolishing industrial foreign training system and of foreign workers' human rights (KJM)  |
| Labor Union (2)             | Korean Confederation of Trade Unions (KCTU) Federation of Korean Trade Unions (FKTU)   |
| Business Association (3)    | Korean Federation of Small Businesses (KFSB) Federation of Korean Industries (FKI) Joint Committee of Industrial Training Companies for Foreigners (JCITCF)  |
| Research Institute (2)      | Korea Labor Institute (KLI) Korea Small Business Institute (KSBI)  |
| University expert group (4) | Prof. Dong-Hun Seol (DHS) Prof. Young-Bum Park (YBP) Prof. Yun-Bo Lee (YBL) Prof. Soo-Dol Kang (SDK)   |

tion party, the GNP. However, the GNP was not in favor of the adoption of the EPSF, although it agreed with the necessity of the adoption of the EPSF during the Presidential election campaign. After hosting a series of internal meetings on this issue, the GNP finally decided to allow members of Congress a free vote on this issue under the recommendation of approval (Huh, 2004). Finally, the Korean National Assembly voted for the EPSF in July 2003.

## Research Method

### Data collection

To obtain empirical data and information necessary for understanding and analyzing Korean international migration policy, we adopted the following procedure. First, this study reviewed archives and pilot studies to establish boundaries for the Korean foreign labor policy network and its major policy actors (i.e., organizations). For archival review, this study identified key archival sources, including newspaper articles, previous studies<sup>1</sup>, and government documents. Newspaper articles and research articles related to the issue of the EPSF were identified by using the Korean Integrated News Database System ([www.kinds.or.kr](http://www.kinds.or.kr)) and the Korean research database, including KISS, DBPIA, and KICDB. In addition, we obtained government documents either directly from related government departments or in-

directly from a Korean Press database search. As a result, we selected 25 policy organizations (or actors) (see [Table 2](#)) and 40 target survey respondents. Depending on the level of policy involvement, some organizations featured more than two target respondents. For example, the MOL and MOJ had four and three respondents, respectively, while the KOP had one respondent. Second, we mailed a survey questionnaire during July and August 2005 to forty target respondents. They should be in a position to grasp the overall relationships and the flows of communication between their affiliation and the other major policy actors. For government agencies, the major targets were directors (or deputy directors) in charge of foreign labor policy. For NGOs, chief directors were selected because the size of organizations was relatively small, and the chief directors themselves were major participants in the policy process.

To increase the response rate, we made telephone calls to all target respondents before and after mailing the questionnaires and asked them to participate in the survey. For those who did not return the questionnaire, we made follow-up calls three times and explained the importance of this research. In the end, 25 out of the 40 respondents answered the questionnaire. The total response rate was 62%. In terms of policy actors, 16 responded among the 25 organizations that were targeted<sup>2</sup>. Non-response may create some concern over the representation of the study sample.

<sup>1</sup> Ko and Lee's study (2004) was particularly useful to identify key policy actors and understand the relationships among policy coalition members. Seol's study (1999) was helpful to understand the Korean labor policy coalition network before 2000.

<sup>2</sup> Among 25 organizations surveyed in this study, six organizations provided dual responses. The careful review of the dual response suggested that they were closely related and generally consistent.

This non-response error, however, would not be problematic in this study for the following reasons. First, almost all major policy organizations identified in previous studies (Ko & Lee, 2004; Seol, 1999) for examining foreign labor policy networks were included. Second, to reduce problems from missing data, this study used partial information (i.e., a response received only from a one-sided party in a reciprocal network) to estimate the non-response from its counterpart. This process can be justified by the nature of network data measuring reciprocal relationships; the relationships described by at least one of the two parties can be effective in understanding their relationships.

## Measures

Two variables are used to measure the policy network activity of focal policy actors. The first measure is *the communication network* that is based on the observed confidential communication among policy actors. The questionnaire asks participants about the existence and frequency of direct confidential communication between policy actors. The frequency is measured using a 5-point scale, from 1 (*almost every day*) to 5 (*once a month or less*). In calculating the score, when there are multiple respondents representing a specific policy actor, the communication density score is calculated using the following formula:

$$C_{ab} = (C_{a_1b} + C_{a_2b} + \dots + C_{a_nb})/n$$

( $C_{ab}$ : Communication density score from policy actor  $a_1$  to policy actor  $b$ ;  $C_{a_1b}$ : Communication density score from policy actor  $a_1$  to policy actor  $b$ ;  $n$ : total number of respondents representing policy actor  $a$ .)

The second measure is *the ally network* that is based on the relationship between policy actors in the policy process. It is measured by asking the policy actors to evaluate their relationship to other policy actors, using the level of cooperation or conflict as the standard. The score is measured using an 11-point scale from 1 (*very high cooperation*) to 11 (*very high conflict*). In calculating the score, when there are multiple respondents representing a specific policy actor, the relationship score is determined using the following formula:

$$R_{ab} = (R_{a_1b} + R_{a_2b} + \dots + R_{a_nb})/n$$

( $R_{ab}$ : Relationship score from policy actor  $a$  to policy actor  $b$ ;  $R_{a_1b}$ : Relationship score from policy actor  $a_1$  to policy actor  $b$ ;  $n$ : total number of respondents representing policy actor  $a$ .)

## Social Network Analysis

To map policy networks, this research depends heavily on *social network analysis* (SNA). Social network researchers have developed a variety of tools to apply statistics to net-

work data. As a result, many statistical analyses based on network data have been produced. These studies have contributed to comparing two relations for the same set of actors to explain the relational attributes of actors in a network and to test hypotheses about relations among actors or groups (e.g., Provan et al., 2007). Also, many software programs were devised for social network analysis, including GRADAP, STRUCTURE, PAJEK, and UCINET.<sup>3</sup> This research uses UCINET because it features various statistical tools as well as a variety of descriptive tools (S. P. Borgatti et al., 2004; Huisman & Duijn, 2005). In this research, the Korean international migration policy network is analyzed at the global network level, the coalition network level, and the egocentric network level.

Another interesting point in analyzing policy networks lies in exploring the relationships between policy networks. In this research, two specific policy networks are analyzed: the communication network and the ally network. To examine the relations between these two policy networks, which have the same policy actors, the quadratic assignment procedure (QAP) was adopted (S. Borgatti et al., 2004; Hanneman & Riddle, 2005). The QAP correlation measures the relations between two networks. In particular, when the relations in the networks are measured at the interval level, the Pearson correlation in the QAP is a good choice (Hanneman & Riddle, 2005). In addition, we used QAP regression to examine the relationship between the communication network and the ally network in the Korean foreign labor policy. QAP regression in the UCINET adopts standard multiple regression and shows whether one specific relation between actors can significantly predict other target relations between them.

## SNA Analysis Results

This research focuses on two kinds of policy networks that include the communication network and the ally network. The communication network is based on the observed confidential communication among policy actors and the ally network, based on the levels of cooperation or conflict among the policy actors, reveals the general relationships among policy actors, regardless of actual joint activities among them.

### Mapping the Communication Network

The communication network was mapped based on the data regarding the existence of confidential communication between policy actors, using UCINET 6 for Windows (S. P. Borgatti et al., 2004). Therefore, this network is a binary network. It should be noted that *confidential*<sup>4</sup> communication between policy actors was used for this network. Therefore, this network focuses more on close communication

<sup>3</sup> For a brief introduction of the software programs, refer to Scott (2000). Also, for a detailed evaluation of a variety of software for social network analysis, refer to Huisman and Duijn (2005).

<sup>4</sup> In the survey, the term 'confidential' is somewhat subjective. Respondents' perceptions of the term may vary significantly. Despite such ambiguity of the term, however, the survey tries to measure the willingness of sharing confidential—at least subjectively recognized confidential—information among policy actors.

between policy actors than on everyday communication. Two coalitions were found in this network. Figure 1 shows the overall structure of the communication network.

First, from the viewpoint of a global network, the “density” of this network was 0.34, with a standard deviation of 0.47. Given that the density of a binary network can be defined as the total number of ties divided by the total number of possible ties, this communication network features a moderate level of density (S. P. Borgatti et al., 2004). Its network centralization was found to be 48.19%. As centrality measures a policy actor’s position in the network, graph centralization shows how equal the power of policy actors is across the network. In other words, the percentage stands for the degree of variability among actors in an observed network as a percentage of that in a star network of the same size. A higher percentage corresponds to a more centralized target network (Hanneman & Riddle, 2005, in Chapter 10). Therefore, it can be said that the communication network has a substantial amount of centralization.

Second, analytic results show that the communication network has two policy coalitions. A TABU analysis was performed to identify coalitions in a network. This analysis is very effective in maximizing the similarities within coalitions or minimizing dissimilarities within coalitions (Hanneman & Riddle, 2005). Basically, coalitions are compared with one another based on their relational properties, such as density and centralization, thereby eliciting specific features in the network.

In our analysis,  $R^2$  was 0.17. The optimized solution shows that the first coalition was composed of policy actors: OGPC, MOJ, MOL, NHRC, KOP, NMDP, NAELC, KLI, KJCMW, KJM, KCTU, FKTU, DHS, YBP, and SDK. The second coalition consisted of policy actors: MOCIE, MOFE, SMBA, GNP, NACIEC, KSBI, KFSB, FKJ, JCITCF, and YBL. In general, the first coalition can be characterized as being in favor of the adoption of the EPSF, while the second coalition is against it. Also, whereas the first coalition was comprised of labor-friendly actors, the second coalition consisted of business-friendly actors. Another interesting point involves the labor unions, such as the Korean Confederation of Trade Unions (KCTU) and the Federation of Korean Trade Unions (FKTU). During the early 1990s, labor unions were opposed to importing foreign workers largely due to the concern that the increase in foreign workers might lead to a decrease in job opportunities for domestic workers. However, labor unions dramatically changed their political position toward the import of foreign workers during the mid-1990s. This sudden shift occurred when a foreign labor condition became a major social issue; rights and interests of foreign workers were not protected by labor laws. For example, some foreign workers suffered from industrial accidents and did not receive compensation. Korean labor unions worked towards the improvement of the employment system for foreign workers and at the same time became prominent proponents of the adoption of the EPSF (Seol, 1999).

Third, policy actors’ major network attributes were measured at the level of the egocentric network. This analysis systematically creates an ego network for each actor within the network and computes a group of ego network attributes. The result showed that the OGPC was most active in the communication network (see Table 3). That is, the

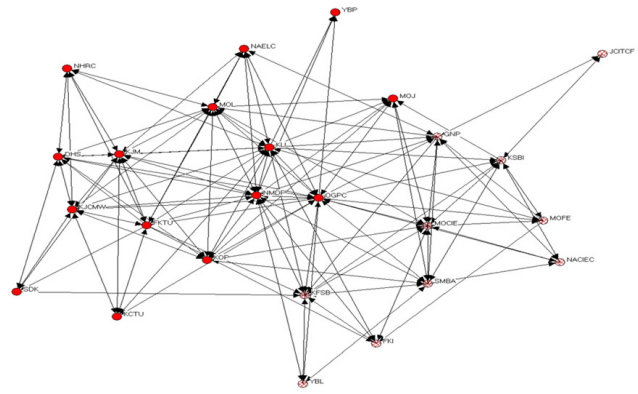


Figure 1. Structure of Communication Network

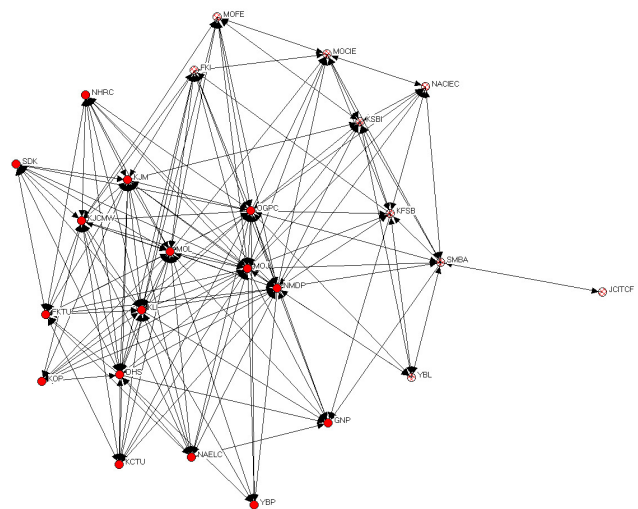


Figure 2. Structure of Ally Network

OGPC had the highest number of ties and the highest scores in the network attributes of centrality, betweenness, and closeness. This result suggested the role of OGPC as a mediator in coordinating conflicts among ministries. Second, KLI and NMDP occupied the next highest positions in the network in terms of the degree of ties and centrality. Also, it should be noted that DHS had quite high levels of ties and centrality in the network, despite being a professor and not an organization. This results show that policy actors with no political agenda are apt to have higher scores of centrality and betweenness since they are in a position to communicate with both coalition members.

### Mapping the Ally Network

The ally network was mapped using the responses from policy actors on the relationships between their own affiliation and other policy actors. The descriptive statistics of the network illustrate that the NMDP (mean score=2.27) had the most cooperative relationship with other policy actors in the network. Additionally, OGPC, MOJ, MOL, KLI, and DHS all had scores higher than 1. On the contrary, KFSB and JCITCF had negative mean scores. Figure 2 shows the overall structure of the network.

**Table 3. Policy Actors' Network Attributes in the Egocentric Communication Network**

| Policy Actor | Ties | Pairs | Density | Centrality | Betweenness | Closeness |
|--------------|------|-------|---------|------------|-------------|-----------|
| OGPC         | 36   | 380   | 35.79   | 20         | 101.6       | 85.7      |
| MOJ          | 9    | 72    | 68.06   | 9          | 2.9         | 55.8      |
| MOL          | 8    | 156   | 56.41   | 13         | 27.2        | 63.2      |
| MOCIE        | 9    | 110   | 44.55   | 11         | 28.5        | 61.5      |
| MOFE         | 6    | 30    | 53.33   | 6          | 2.6         | 55.8      |
| SMBA         | 8    | 90    | 53.33   | 10         | 18.4        | 60.0      |
| NHRC         | 7    | 30    | 90.00   | 6          | 0.8         | 52.2      |
| KOP          | 8    | 90    | 64.44   | 10         | 14.4        | 61.5      |
| NMDP         | 8    | 240   | 40.83   | 16         | 42.9        | 72.7      |
| GNP          | 9    | 132   | 44.70   | 12         | 30.4        | 57.1      |
| NAELC        | 3    | 42    | 78.57   | 7          | 5.3         | 58.5      |
| NACIEC       | 6    | 20    | 80.00   | 5          | 0.8         | 53.3      |
| KLI          | 11   | 306   | 36.27   | 18         | 54.4        | 80.0      |
| KSBI         | 3    | 72    | 45.83   | 9          | 26.3        | 57.1      |
| KJCMW        | 3    | 110   | 66.36   | 11         | 12.1        | 50.0      |
| KJM          | 0    | 132   | 60.61   | 12         | 23.5        | 64.9      |
| KCTU         | 8    | 20    | 90.00   | 5          | 1.1         | 54.5      |
| FKTU         | 1    | 156   | 51.92   | 13         | 14.4        | 66.7      |
| KFSB         | 47   | 110   | 42.73   | 11         | 13.3        | 43.6      |
| FKI          | 4    | 30    | 46.67   | 6          | 1.4         | 52.2      |
| JCITCF       | 0    | 2     | 0.00    | 2          | 0.4         | 40.7      |
| DHS          | 4    | 90    | 71.11   | 10         | 10.9        | 57.1      |
| YBP          | 6    | 6     | 100.00  | 3          | 0           | 4.0       |
| YBL          | 10   | 12    | 83.33   | 4          | 2.9         | 51.1      |
| SDK          | 2    | 20    | 60.00   | 5          | 1.2         | 47.1      |

First, at the global network level, the density of this network was 0.80, with a standard deviation of 2.36. The density was calculated using the total of all values divided by the number of possible ties in a valued network. This score indicates the average value in the network. The overall relationships in the ally network were evaluated as somewhat cooperative because the density score was greater than zero. In the ally network, a score of zero meant a neutral relationship, and positive scores (maximum score=5) indicated a stronger cooperative relationship. Its network centralization was found to be 39.94%. As already mentioned, graph centralization shows the overall equality of individual actors' power over the network as a whole. Accordingly, it can be said that the ally network has a substantial amount of centralization.

Second, the analysis results show that the communication network has two policy coalitions as a result of a TABU search performed to find clusters in the network. In the analysis,  $R^2$  was 0.25. The first coalition was composed of 16 policy actors: OGPC, MOJ, MOL, NHRC, KOP, NMDP, GNP, NAELC, KLI, KJCMW, KJM, KCTU, FKTU, DHS, YBP, and SDK. The second coalition consisted of nine actors: MOCIE, MOFE, SMBA, NACIEC, KSBI, KFSB, FKI, JCITCF, and YBL. It should be noted that the first coalition is larger than

the second, and the first coalition includes all policy actors highly embedded in the ally network. These traits imply that the first coalition was in a stronger position.

Third, policy actors' major network attributes were identified at the egocentric network level. As [Table 4](#) reports, the MOJ was the most highly embedded in the ally network as it had the highest number of ties and the highest scores in the network attributes of centrality, betweenness, and closeness. The OGPC and the NMDP were the next highest in the network in terms of the degree of ties and centrality. It should be noted that the DHS had quite high levels of ties and centrality in the network, despite being a professor and not an organization. This result hints that policy actors are more apt to pursue cooperative relationships with actors holding formal voting power in the policy process.

### Comparison between the Communication Network and the Ally Network

In comparing the communication network with the ally network, it should be recognized that the former is a binary network, and the latter is a valued network. Therefore, some network attributes, such as network density, cannot be directly compared. At the global network level, the degree of

**Table 4. Policy Actors' Network Attributes in the Egocentric Ally Network**

| Policy Actor | Ties <sup>a</sup> | Pairs <sup>b</sup> | Density <sup>c</sup> | Centrality | Betweenness | Closeness |
|--------------|-------------------|--------------------|----------------------|------------|-------------|-----------|
| OGPC         | 196               | 462                | 42.42                | 91.67      | 11.76       | 92.31     |
| MOJ          | 221               | 506                | 43.68                | 95.83      | 12.77       | 96.00     |
| MOL          | 168               | 306                | 54.90                | 75.00      | 3.61        | 77.42     |
| MOCIE        | 62                | 90                 | 68.89                | 41.67      | 0.98        | 63.16     |
| MOFE         | 40                | 56                 | 71.43                | 33.33      | 0.33        | 58.54     |
| SMBA         | 51                | 90                 | 56.67                | 41.67      | 8.73        | 63.16     |
| NHRC         | 62                | 72                 | 86.11                | 37.50      | 0.02        | 60.00     |
| KOP          | 49                | 56                 | 87.50                | 33.33      | 0.02        | 58.54     |
| NMDP         | 204               | 462                | 44.16                | 91.67      | 11.12       | 92.31     |
| GNP          | 49                | 72                 | 68.06                | 37.50      | 1.09        | 61.54     |
| NAELC        | 70                | 90                 | 77.78                | 41.67      | 0.18        | 61.54     |
| NACIEC       | 35                | 42                 | 83.33                | 29.17      | 0.00        | 58.54     |
| KLI          | 161               | 272                | 59.19                | 70.83      | 2.61        | 75.00     |
| KSBI         | 58                | 90                 | 64.44                | 41.67      | 1.05        | 63.16     |
| KJCMW        | 146               | 210                | 69.52                | 62.50      | 1.39        | 70.59     |
| KJM          | 142               | 210                | 67.62                | 62.50      | 1.80        | 70.59     |
| KCTU         | 62                | 72                 | 86.11                | 37.50      | 0.02        | 60.00     |
| FKTU         | 111               | 132                | 84.09                | 50.00      | 0.33        | 64.87     |
| KFSB         | 62                | 90                 | 68.89                | 41.67      | 0.82        | 63.16     |
| FKI          | 59                | 90                 | 65.56                | 41.67      | 0.68        | 61.54     |
| JCITCF       | 0                 | 0                  | 0                    | 4.17       | 0.00        | 39.34     |
| DHS          | 130               | 210                | 61.90                | 62.50      | 1.89        | 70.59     |
| YBP          | 27                | 30                 | 90                   | 25.00      | 0.02        | 55.81     |
| YBL          | 25                | 30                 | 83.33                | 25.00      | 0.00        | 57.14     |
| SDK          | 46                | 56                 | 82.14                | 33.33      | 0.02        | 58.54     |

<sup>a</sup>Ties: Number of directed ties, <sup>b</sup>Pairs: Number of ordered pairs, <sup>c</sup>Density: Ties divided by Pairs

centralization between these networks differs, as the communication network is more centralized. This means that the structure of the confidential communication network is more hierarchical than that of the ally network. In other words, this result implies that collective action among policy actors may be concentrated around core policy actors.

Regarding policy coalitions in the network, each network had two policy coalitions as a result of the TABU analysis. Both the communication network and the ally network had approximately the same coalition members. The only exception was the Grand National Party (GNP). Specifically, the GNP was not positive to the adoption of the EPSF from the beginning of the policy debate because many business associations, a major support group of the GNP, strongly opposed it. At the same time, however, the GNP promised to adopt the EPSF in the previous presidential election campaign, expecting support from the labor unions. This ambivalent position was largely related to huge pressure from both the business-side actors and labor-friendly actors in the policy processes and made its coalition membership different between the communication network and the ally network.

In terms of the egocentric network, policy actors highly embedded in the networks were very similar: both the networks include the OGPC and the NMDP, and the communication network featured the KLI while the ally network included the MOJ. Lowly embedded policy actors were exactly the same between these two policy networks. [Table 5](#) shows a comparison between the communication network and the ally network.

To examine the relationships between the communication network and the ally network, a QAP correlation was performed using UCINET 6.0. The analysis results show that the Pearson correlation between these networks was 0.567 ( $p < .001$ ). Thus, the communication network and the ally network were highly related. Also, a QAP regression was also conducted to examine the predicting power of the ally network on the communication network. For that purpose, the communication network became the DV, and the ally network the IV. The model has quite strong explanatory the predicting power of power;  $R^2$  was 0.32 ( $p < .001$ ), which means 32% of the variability in the communication network can be explained by the ally network



**Table 5. Comparison of Key Factors of the Communication Network and the Ally Network**

| Levels             | Factors                | Communication Network  | Ally Network  |
|--------------------|------------------------|--|---|
| Global Network     | Density                | 0.34   | 0.80  |
|                    | Centralization         | 48.19%   | 39.94%  |
| Coalition Network  | Coalition A            | OGPC, MOJ, MOL, NHRC, KOP, NMDP, NAELC, KLI, KJCMW, KJM, KCTU, FKTU, DHS, YBP, SDK | OGPC, MOJ, MOL, NHRC, KOP, NMDP, <u>GNP</u> , NAELC, KLI, KJCMW, KJM, KCTU, FKTU, DHS, YBP, SDK |
|                    | Coalition B            | MOCIE, MOFE, SMBA, <u>GNP</u> , NACIEC, KSBI, KFSB, FKI, JCITCF, YBL               | MOCIE, MOFE, SMBA, NACIEC, KSBI, KFSB, FKI, JCITCF, YBL   |
| Egocentric Network | Highly Embedded Actors | OGPC, KLI, NMDP  | MOJ, OGPC, NMDP   |
|                    | Lowly Embedded Actors  | JCITCF, YBP, YBL   | JCITCF, YBP, YBL  |

### Discussion and Conclusion

In examining the process of adopting the EPSF, an important Korean international migration policy change, this research used SNA to visualize the policy network structure that describes the interdependent relationships among policy actors. On the basis of the Advocacy Coalition Framework, this research examined the relationships at three different levels, including the global network level, coalition network level, and egocentric network level. Also, it analyzed the structure of policy coalitions and the network attributes of policy actors in each coalition.

In the study, we found that among the four policy factors ACF identified to influence policy change, external events were the most significant influencing factor in the adoption of the EPSF. As mentioned previously, the victory of the ruling party in the 2002 presidential election was significant in adopting the EPSF. Thus, the government was able to assemble a coalition to advocate the adoption of the EPSF. The coalition was comprised of government agencies, including the OGPC, the MOL, the NHRC, and the KOP. Also, policy-oriented learning occurred during the process of policy change in transferring from the ITSF to the EPSF. Specifically, it played a role in alleviating concerns about adopting the EPSF by enhancing the understanding of the EPSF by the general public and stakeholders.

The SNA mapped the policy network structure that defined the relationships between policy actors at three different levels, including the global network level, coalition network level, and egocentric network level. At the global network level, we found that the communication network is more hierarchical than the relational network. This result suggests that garnering collective action may need something more than mere positive relationships between policy actors and that trust may play an important role in coordinating and facilitating collective action between policy actors. At the coalition network level, we found a government-led advocacy coalition influential in advocating EPSF. The 2002 presidential election victory enabled the ruling party to assemble a government coalition for advocating the EPSF adoption that included the Office for Government Policy Coordination and the Office of the President. Before

winning the election, there were confrontational relations between the Ministry of Labor and the Ministry of Small Business, largely due to their oppositional view on the introduction of the EPSF at the beginning of policy discussion. At the egocentric network level, results showed that both the OGPC and the NMDP, the ruling party, played the significant role of the coordinator in the policy process. This result implies the significance of the coordinator in the policy network; i.e., as coordinators usually play the role of brokerage between conflicting coalitions, it is critical to win the support of these coordinating policy actors. In a sense, the fact that these coordinators belonged to the coalition in favor of the adoption of the EPSF hints at the influence of this coalition in the policy process.

Another interesting result was obtained from the examination of the relationship between the communication network and the ally network. Results indicate that when we have information about relations between policy actors, we can better predict their communication relation by 32%. The implication is that the existence of a simple ally relationship between policy actors is not always connected to joint collective action. In other words, policy actors choose communication partners not only on the basis of their ally relations but on some other factors, such as trust relationships. In addition, the scores of network attributes, including density, centrality, betweenness, and closeness, show some meaningful implications to predict policy outcomes. As Table 5 shows, the coalition with highly embedded policy actors is likely to realize its policy goals. For example, highly embedded actors such as OGPC, KLI, NMDP, and MOJ had strong network resources in the policy process and belonged to the coalition that supports the adoption of the EPSF.

Theoretically, our network analysis results can contribute to a better understanding of the ACF. These network analyses quantified the degree of relationship among coalition members as well as assessed the determinants for the relationship. Typically, the ACF is criticized for not being able to explain a dynamic relationship between policy participants in an alliance and determine factors that can affect their collective actions.

Future research should consider the element of trust.

This is largely because it is believed that trust could play a significant role in facilitating and managing relationships between and among policy actors in a network. As such, several studies (Fukuyama, 1995; Putnam, 1993) suggested that trust is a significant and positive factor in formulating network relationships at the individual, organization, and

community levels as well as producing social outcomes, including economic progress and regional development.

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