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2014 Modularization of Korea's Development Experience:

Think Tanks of Korea: Contributions to Economic Development and Their Evolution

2014

MINISTRY OF STRATEGY AND FINANCE

MYONGJI UNIVERSITY

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Preface

The study of Korea's economic and social transformation offers a unique window of opportunity to better understand the factors that drive development. Within about one generation, Korea transformed itself from an aid-recipient basket-case to a donor country with fast-paced, sustained economic growth. What makes Korea's experience even more remarkable is that the fruits of Korea's rapid growth were relatively widely shared.

In 2004, the Korean Ministry of Strategy and Finance (MOSF) and the Korea Development Institute (KDI) launched the Knowledge Sharing Program (KSP) to assist partner countries in the developing world by sharing Korea's development experience. To provide a rigorous foundation for the knowledge exchange engagements, the KDI School has accumulated case studies through the KSP Modularization Program since 2010. During the first four years, the Modularization Program has amassed 119 case studies, carefully documenting noteworthy innovations in policy and implementation in a wide range of areas including economic policy, admistration·ICT, agricultural policy, health and medicine, industrial development, human resources, land development, and environment.Individually, the case studies convey practical knowhow and insights in an easily accessible format; collectively, they illustrate how Korea was able to kick-start and sustain economic growth for shared prosperity.

Building on the success during the past four years, we are pleased to present an additional installment of 19 new case studies completed through the 2014 Modularization Program. As an economy develops, new challenges arise. Technological innovations create a wealth of new opportunities and risks. Environmental degradation and climate change pose serious threats to the global economy, especially to the citizens of the countries most vulnerable to the impacts of climate change. The new case studies continue the tradition in the Modularization Program by illustrating how different agents in the Korean society including the government, the corporations, and the civil society organizations, worked together to find creative solutions to challenges to shared prosperity. The efforts delineated include overcoming barriers between government agencies; taking advantage of new opportunities opened up through ICT; government investment in infrastructure; creative collaboration between the government and civil society; and painstaking efforts to optimize management of public programs and their operation. A notable innovation this year is the development of two “teaching cases”, optimized for interactive classroom use: Localizing E-Government in Korea and Korea’s Volume-based Waste Fee System.

I would like to express my gratitude to all those involved in the project this year. First and foremost, I would like to thank the Ministry of Strategy and Finance for the continued support for the Modularization Program. Heartfelt appreciation is due to the contributing researchers and their institutions for their dedication in research, to the former public officials and senior practitioners for their keen insight and wisdom they so graciously shared as advisors and reviewers, and also to the KSP Executive Committee for their expert oversight over the program. Last but not least, I am thankful to each and every member of the Development Research Team for the sincere efforts to bring the research to successful fruition, and to Professor Taejong Kim for his stewardship.

As always, the views and opinions expressed by the authors in the body of work presented here do not necessarily represent those of the KDI School of Public Policy and Management.

December 2014

Joon-Kyung Kim

President

KDI School of Public Policy and Management

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Chapter 3

Summary

After World War II, the economic development process of developing countries incorporated an important factor, one that was different from the UK, which achieved the very first Industrial Revolution. That is, the pivotal role of the government. The Industrial Revolution in the UK was a product of modern economic growth that resulted from the natural occurrence of technological innovation by ordinary activities of economic players. However, developing countries that planned to achieve economic development after World War II, as well as industrial European countries following the UK, have benchmarked the UK or other developed countries as their role model, and the government actively led the way to achieve economic development. The case of Korea is often mentioned as the representative case of a government succeeding in leading the country's economic development.

In order for the government to lead economic development, the policy authorities must have an in-depth understanding of analytic skills, a broad understanding of economic development, and the insight to aptly forecast economic issues. However, the policy makers in developing countries, as well as those of developed countries, generally do not have such information or the capacity given a lack of objectivity, among many other reasons. This goes for academia, media, and politics. Therefore, even though there is a request from the government, the private sector is often unable to provide appropriate information or the consultation that can be practically utilized for policy implementation. In such situations, the suggestions or criticisms from the private sector on major policies, and the response of the government, may end up being a waste of time rather than becoming a productive discussion, yielding no real contribution to economic development.

As a means of solving these kinds of problems, the governments of developing countries try to produce information of high value and consultations needed for the establishment and implementation of economic policies. This was the very reason many governments established government sponsored research institutes. The government of the Republic of Korea was no exception. Starting with the foundation of the Korea Development Institute (KDI) in 1971, the Korean government has continuously established think tanks to conduct research in various fields for the past 40 years that has provided needed consultation for formulating policies.

Including the KDI, think tanks in Korea not only produced publications on research papers, but also provided high quality consultations on the core issues the government was facing, and the future path of Korean society through close collaborations with policy authorities. Also, the policy authorities referred to these consultations to plan, make amendments on, or implement the policies. Also, they have contributed to enabling the citizens to have a correct understanding of the government policies by announcing their research results or presenting their opinion on major policies in the form of news articles or interviews. As a result, think tanks, including the KDI, are evaluated to have greatly contributed to the economic development of Korea.

Based on Korea's experience, what kind of qualifications should newly established think tanks in developing countries have in order to fulfill expectations? The case study on the KDI emphasizes three qualifications. First is having human resources able to conduct research that contributes to developing the national economy. During the late 1960s, Korea did not have a sufficient pool of human resources that could actually contribute to economic policies. To overcome these limitations, the persons who took the initiative to establish the KDI persuaded the people who have Ph.Ds. from abroad to work for the KDI. Once the highly educated human resources were secured, a high quality research outcome could be produced by the research institute, and this raised the status of the research institute. This in turn created a virtuous cycle of attracting more intelligent people to join this research institution. Moreover, there have been additional efforts to increase the ability of these secured human resources to reach their maximum capacity. Therefore, the groundwork for conducting sound policy research in a continuous manner was realized.

Second was securing the independence of the research. While the KDI conducted research projects that supported government policies or conducted research on the practical issues needed for implementing those policies since the early 1970s, the KDI fundamentally reexamined the government policy and did not hesitate in suggesting changes to the direction of a policy when it was necessary. The most representative cases were when KDI argued in the early 1970s that the policy to overtly increase the economic growth rate must be controlled, or when in the mid-1970s they conducted a research for market-friendly competition policy and insisted that the government policy must be changed. The KDI not only simply supported the government-led policies in a posteriori manner, but also evaluated the government policies from the viewpoint of the overall development of the national economy and also made necessary suggestions. The KDI was able to truly help formulate government policies that contributed to economic development. The fact that the KDI was independent is an important factor and its ability to attract capable human resources cannot be overemphasized.

Third is the government's attitude that allows the research institute's autonomous research. Policy authorities in many countries, as well as those in Korea, expect the government sponsored research institutes to conduct research supporting their policies. Considering these situations, it is not easy to conduct research in the direction that can be, in a sense, interpreted as being critical to the proposed policies, just like how the KDI had done. The reason why the KDI was able to proceed with this function since its establishment was because the Economic Planning Board, and even the president of the Republic of Korea – the person with the highest authority, well understood the role of the KDI. In other words, even though the KDI made an argument that did not please the policy authorities, the government did not eliminate the KDI, nor did the government prevent the KDI from making its arguments. This kind of approach by the government actually provided the groundwork for the KDI to conduct research for the nation, not for a specific political regime or for the government only. And thus the credibility of the KDI, created as such, became the very asset the government was able to pivotally utilize afterwards. In other words, the KDI was able to successfully handle the tasks, such as a preliminary feasibility test, which only highly independent institutions are able to carry out, and eventually contributed to having the government policies be effectively executed.

Lastly, this kind of think tank was able to grow based on the aforementioned three factors, thanks to the endeavors of the members of the KDI. Even though a superb environment is set up, when the members are not dedicated to putting their greatest efforts into their work, it will be impossible to achieve such outstanding research progress. Also, no matter how hard the researchers as individuals thrive to do their best, in situations where the members of the group are not willing to interact with each other nor wanting to actively share their ideas, it is extremely difficult to achieve outstanding research outcomes. All members of the research institute should have in mind that all research progress of the institute is also theirs to share, by having interest in research projects conducted by others within the institute as well. Also, all members of the institute must have a sense of responsibility that one's own research outcome may affect the reputation of the research institute as a whole, thus motivating them to do their best. This is the ultimate driving force in making a research institute contribute to the development of a nation.

Chapter 1

Introduction

Introduction

The Republic of Korea achieved rapid economic growth from the early 1960's until the mid-1990's. While the government understood its role during this time to lead economic growth by establishing and executing the Economic Development Plans, various expertise or professional knowledge in many different areas was necessary in order for those plans to be effectively operated without difficulty. In other words, collecting a vast amount of information and conducting an elaborate analysis is needed in order to gain precise knowledge on how to set the direction of development, to understand what extent the development scope of possible economic development is not going to harm economic stability, and what kind of policy must be implemented in order to achieve these goals. Public servants who implement policies face much difficulty in doing the abovementioned things, therefore it is inevitable to seek various counseling. These kinds of experts may exist in many different fields such as in academia, media, and the private sector. The case for Korea was to establish an organization formed by the government to utilize these experts to its fullest. These organizations are the government sponsored think tanks.[1]

As of 2014 in Korea there are 23 research institutes established under the Korea Council for Economics, Humanities and Social Sciences (NRCS), which regulates the government sponsored think tanks, and these are the representative think tanks of Korea. These institutes

1. As for the government sponsored research institutes, the science and engineering research institutes are included as well as the humanities and social-scientific research institutes, which are stated in this paper. The government of the Republic of Korea has established numerous science and engineering research institutes since the 1960s, such as the KIST, which all of those institutes greatly contributed to the development of the Korean economy. In this paper, We will mainly discuss the humanities and social-scientific government sponsored research institutes. To gain knowledge on the scope of contribution of science and engineering research institutes, see Hong, Jeon, and Kim (2013) and Ko and Kang (2014), etc.

were first established in 1971, and most of them were established in the 1980s and the 1990s. There are still some in the process of being established in the 2000s.[2] Were these research centers contributing to the Korean economy as expected? If so, then how were they able to achieve this progress? What was their method of organizing the research institutes and how did they operate these organizations?

The best way to answer these questions is to conduct an experiment. In other words, comparing the estimates of the Korea economy's level of growth and development had there not existed these research institutes, to the actual historical path. It is indeed very difficult to conduct such a counter-factual experiment; in fact, it is impossible. Therefore, in this paper, we will investigate in-depth what Korean government think tanks actually do, as the best alternative plan. Also, the scope of contribution of government think tanks will be estimated by analyzing what kind of research attempts the government think tanks conducted, and also how these institutes provide consultation to the government based on their research progress.

In this paper we will proceed with two main analyses in order to observe the activities of think tanks. First is the general analysis on think tanks. As mentioned in the <Appendix>, A think tank is a general term for organizations providing consultations related to government policies. It is known that these kinds of organizations have been immensely increased all over the world after World War II. There exists a great variety of these research institutes according to the their founders, resource procurement method, the unique characteristic of the task of each research or consultation methods. Therefore, attempts to conduct an overall review of their respective activity have only started recently. Having these general present conditions as a precondition, in Chapter 2, We will generally explain the current state of the think tanks in Korea, and then investigate what can be the core problems related to think tanks.[3]

Secondly, we will conduct an in-depth analysis by choosing one government-sponsored think tank in order to achieve a detailed understanding of the essence and development process of research institutes. The target institution is the Korea Development Institute (KDI). The KDI is a comprehensive economic policy research institute that was founded in 1971 as a government think tank. It has greatly contributed to the development of the Korean economy for the past 40 years and is still continuing to play an important role. According

2. See ⟨Table 2-1⟩ for information on the Research Institutes under the Korea Council of Humanities Social Research Institutes and their foundation years.

3. The most representative papers are McGann (2005, 2012) and also the domestic publications of Kang et al.(2006).

to the “Think Tanks and Civil Societies Program (TTCSP)” from the international relations program of the University of Pennsylvania in the U.S. which investigates think tanks around the world and announces their rankings, KDI placed 58th among the research institutes of the world in 2013, and 15th among the non-U.S. organizations.[4] This is one of the cases where the KDI’s prestigious reputation was recognized not only in Korea but also worldwide.

While KDI is evaluated simply as one of the most successful think tanks, there are many other reasons for choosing the KDI among all the government sponsored research institutes. The KDI is the oldest think tank in Korea, thus it can provide many implications to understand the interaction or correlation between economic development and think tanks, or the relation between the government and think tanks. Also, reviewing the internal structure of the KDI and their utilization of resources will provide useful information for understanding the factors involved in becoming a successful think tank. Countries that plan to systematically execute national economic development plans–such as Saudi Arabia, Myanmar, Algeria, and Kuwait–are trying to or have already established their government sponsored research institutes, considering the KDI as their model. Thus, the case study of the KDI is expected to greatly contribute to helping these countries’ effectively achieve the establishment of a reliable research institute.[5]

In order to achieve the above-mentioned aspects, first of all, We will explain the general facts of think tanks, and then have an overview of the current state of think tanks in Korea in chapter 2. Based on these explanations, We will introduce the KDI in chapter 3. We will basically explain what kind of tasks were given to the KDI, how the organization was run to fulfill those tasks, and what kind of relationship they try to maintain with the government. Lastly, based on the abovementioned, We will propose a comprehensive evaluation in chapter 4.

4. Maeil Business Newspaper 2013.1.23.

5. It is explained in detail in Section 1 of Chapter 3 regarding the meaning of the case study on the KDI.

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Chapter 2

Think Tanks of Korea

Think Tanks of Korea

1. The Definition and Types of Think Tanks

1.1. Definition

A think tank is a public research institute that provides policy-oriented research, analysis, and consultation on domestic and international issues to enable the policy decision-makers and the public to make informed decisions on public policies.[6] Sometimes, although it may be quite similar, it also is stated as an 'organization that conducts research on social policy, political strategy, economics, military, technology, cultural issues and research that supports a certain policy'[7] or a 'group of intelligent people of all fields of study collaborating in order to conduct research and analysis or gain research development to ultimately provide those achievements to some other person or entity.'[8]

According to Kang et al. (2006) the word 'think tank' originated from the word 'tank' which meant a safe place for the US national defense experts to gather and discuss national defense strategies during World War II. In other words, while the name started as a military phraseology meaning a gathering of national defense experts to make efficient decisions during World War II, it has now become a commonly and widely used word to designate a major government policy research institute. Regarding the history of think tanks and the current situation of think tanks worldwide, we will explain in detail in the <Appendix>.

6. McGann (2012).

7. English version of Wikipedia (http://en.wikipedia.org/wiki/Think_tank).

8. The Internet Encyclopedia (http://terms.naver.com/entry.nhn?docId=69873&cid=43667&categoryId=43667).

There are various forms of think tanks according to the characteristics or budget procurement method. The most representative forms of think tanks are private think tanks, such as the Brookings Institution in the US, research institutes established by the government, specific private corporation research institutes, and university-established research centers. There are many different tasks for these organizations according to their types and forms. However, Kang et al. (2006) mentioned several general functions of think tanks despite their differences. First, think tanks provide many different policy ideas to decision-makers on major issues. Second, it acts as a labor pool of experts to help government administrative offices or the parliament in charge of policy decisions. Third, it analyzes the demand of the public for policies on behalf of policymakers through public opinion polls, seminars or public hearings. Fourth, it takes the role of advertising a certain policy or is in charge of educating those who may be affected by a proposed policy. Fifth, since they are deeply related to political change such as elections, they share the responsibility of the political effect of a policy on a certain party.

1.2. Types

Kang et al. (2006) categorizes the types of think tanks of Korea into five categories according to the institution in charge of the foundation as follows: government think tanks, municipalities think tanks, political party think tanks, private company think tanks, and independent think tanks.[9] Each differs according to its purpose of establishment or activities. However, they share similarities from the fact that they try to have influence government policy and its implementation. We will now explain the think tanks according to type.

1.2.1. Government Sponsored Think Tanks

First are the government sponsored think tanks. These are the most active think tanks in Korea, and are the major target for analysis in this paper. While non-government think tanks were established since the 1990s, many of the government sponsored think tanks were already founded during the 1970s and the 1980s. Also, the number and budget size of government sponsored think tanks overwhelmingly exceeded those of the other types.

In the past, during the government-led economic development period, many affiliate research institutes of each government branch were established to perform a major role for the policy formulation and implementation. Currently, the government sponsored research institutes in the field of economics, humanities and social studies belong to the National

9. There are also research institutes affiliated with universities, however, those will be excluded from the discussion since it is quite difficult to consider these as independent think tanks.

Research Council for Economics, Humanities and Social Sciences (NRCS) under the auspices of the Prime Minister's Office. <Table 2-1> lists the government sponsored think tanks under the control of NRCS chronologically listed by their founding years.

Table 2-1 | Research Institutes under the National Research Council for Economics, Humanities and Social Sciences (NRCS)

Name of Institution	English Abbreviation	Founding Year
Korea Development Institute	KDI	1971
Korea Institute for Health and Social Affairs	KIHASA	1971
Korean Educational Development Institute	KEDI	1972
Korea Institute for Industrial Economics and Trade	KIET	1976
Korea Rural Economic Institute	KREI	1978
Korea Research Institute for Human Settlements	KRIHS	1978
Korean Women's Development Institute	KWDI	1983
Korea Information Society Development Institute	KISDI	1985
Korea Energy Economics Institute	KEEI	1986
Science and Technology Policy Institute	STEPI	1987
The Korea Transport Institute	KOTI	1987
Korea Labor Institute	KLI	1988
Korean Institute of Criminology	KIC	1989
National Youth Policy Institute	NYPI	1989
Korea Institute for International Economic Policy	KIEP	1989
Korea Legislation Research Institute	KLRI	1990
Korea Institute for National Unification	KINU	1990
The Korea Institute of Public Administration	KIPA	1991
Korea Institute of Public Finance	KIPF	1992
Korea Environment Institute	KEI	1992
Korea Maritime Institute	KMI	1997
Korea Research Institute for Vocational Education and Training	KRIVET	1997
KDI School of Public Policy and Management	KDI School	1997
Korea Institute for Curriculum and Evaluation	KICE	1998
Korea Institute of Child Care and Education	KICCE	2005
Architecture and Urban Research Institute	AURI	2007

Government sponsored think tanks have great influence on the policy formulation or implementation process, due to the fact that they are able to collect policy related information and data with ease, and can directly be involved in the current policy issues. Also, they offer job stability, which is a significant advantage in recruiting highly qualified researchers. However, while having a close relationship with the government may be an advantage in terms of ease in collecting information or having influence on the policy formation process; at the same time, they face difficulties such as priorities being placed on short-term research projects rather than long-term research projects, or having to conduct research mainly on current issues, as well as lacking independence when it comes to the content of the research. Therefore, it is crucial for these think tanks to come up with a smart idea for operating the institution by emphasizing the advantages and preventing the disadvantages.

Before finalizing the discussion of government sponsored think tanks, let us take a brief look at the operations of the NRCS. The NRCS is an institution established under the Prime Minister's Office in 2005 to support national research projects on policy and contribute to knowledge development. According to the 'Establishment, Operation, and Promotion of Government Sponsored Think Tanks Act', it supports and promotes the government sponsored think tanks in the economics and humanities and social sciences field, as well as has control over those institutes systematically. The legal status of the NRCS is defined as an "Other Public Institution". The NRCS with its current name was established in 2005, however, it was formerly the Korea Council of Economic & Social Research Institutes and the Korea Council of Humanities & Social Research Institutes, both founded in 1999. The merger of these two institutes in 2005 resulted in the present NRCS. In the past, it was normal to have a related research institute for each government office. However, there was a possibility for such an organizational structure to hinder the independence of the research institute. Also, in accordance with the globalization and the informationization trend, a need for collaborative research, planning research, or interdisciplinary convergence research among research institutes resulted in the current form of the research council having control over many similar institutes.

This format, having one research council take control over many research institutes, may have advantages and disadvantages. There seems to be no such actual research or evaluation on the current system and activities of the research council as of now. However, although the NRCS has the supervisory function over the affiliated research institutes, they lack human resources that can conduct collaborative research projects. Also, the operation is insufficient for utilizing its original founding purpose. These criticisms are released through the political sector or by the media at times.[10] It seems like there should be an in-depth analysis made on the NRCS system.

1.2.2. Think Tanks Established by Municipalities

Second are the think tanks established by the municipalities. When municipalities were being formed, many of these entities started to establish research institutes to promote regional development. As of now, all wide-area (large city) municipalities have their own research institutes, KDI being the model institution. <Table 2-2> lists the research institutes under the wide-area autonomous government in Korea.

The relation between these institutes and the municipalities are similar to that of the government sponsored think tanks and the government. In other words, these research institutes are the ones that provide ideas related to policy decisions and implementation for the local government, and also provide regional development plans.

Although the local autonomy exists systematically, most of the resources are concentrated in the central government. Therefore, the local government does not have actual authority. Also, the qualified workforce is mostly concentrated in the central government, thus the central government's policy does not necessarily reflect each regional demand. Based on these facts, the think tanks established by the municipalities are evaluated to have produced positive impact, since they are considered a means of decentralization by attempting to solve the abovementioned problems and seek policy solutions. However, these institutions still face challenges in recruiting a high quality workforce and it is not easy to gain independence from the head of the local autonomous entity or from senior government officials. In other words, the think tanks under the municipalities can be said to have the same potential problems that government sponsored think tanks have.

10. Money Today 2011.10.22., SBS CNBC 2013.10.22., Daily NK 2012.12.17., etc.

Table 2-2 | Think Tanks Established by the Wide-Area (Large City) Municipalities

Name of Institution in English	English Abbreviation	Founding Year
The Seoul Institute	SI	1992
Busan Development Institute	BDI	1992
Daegu Gyeongbuk Development Institute	DGI	1991
Incheon Development Institute	IDI	1996
Daejeon Development Institute	DJDI	2001
Gwangju Development Institute	GJI	2007
Ulsan Development Institute	UDI	2001
Gyeonggi Research Institute	GRI	1995
Research Institute for Gangwon	RIG	1994
Chungnam Development Institute	CDI	1995
Chungbuk Research Institute	CRI	1990
Jeonnam Research Institute	JERI	1991
Gyeongnam Development Institute	GNDI	1992
Jeju Development Institute	JDI	1997

1.2.3. Think Tanks Established by Private Companies

The third type of think tanks is established by private companies. For the case of Korea, most of the large conglomerates, banks, or securities companies operate their own research institutes. Examples are the Samsung Economic Research Institute (SERI), the LG Economic Research Institute (LGERI), and the Hyundai Research Institute (HRI), to name a few. The Korea Economic Research Institute (KERI) or the Center for Free Enterprise (CFE) under the Federation of Korean Industries (FKI) can also be included in this category from a broad sense. <Table 2-3> lists the major think tanks established by private companies.

Table 2-3 | Think Tanks Established by Private Companies

Name of Institution	English Abbreviation	Founding Year
Korea Economic Research Institute	KERI	1981
Samsung Economic Research Institute	SERI	1986
LG Economic Research Institute	LGERI	1986
Hyundai Research Institute	HRI	1986
Center for Free Enterprise	CFE	2000
SK Research Institute for SUPEX Management	SKRI	2002

Research activities of these research institutes are mainly composed of macroeconomic briefs and economic trends, which are directly related to the affiliated private company. These research institutes have recently expanded their scope of research to political, social and cultural areas. Especially the Samsung Economic Research Institute, it not only conducts research on the traditional fields such as economics, business and industry, but also on topics such as political, social and international issues from a multilateral dimension. Thus, it is recognized as the center of attention. Even their research outcomes are produced not only in the traditional format of research reports, but also in many different forms using multimedia, such as audio reports.[11]

The major role of think tanks established by private companies is basically to support the activities of the affiliated company. Therefore, the selection of research topics or the research outcome produced may easily be limited in the sense of autonomy and independence. Also, there is a high possibility that they may be relatively less interested in topics that are socially beneficial to the public.

1.2.4. Think Tanks Established by Political Parties

The fourth type is think tanks established by political parties. The Youido Institute (YDI) of the Saenuri Party, the Institute for Democracy and Policies (IDP) of the New Politics Alliance for Democracy are the representative examples. As stated in the political parties law, of which revisions were made in March 2004 and August 2005, it is now mandatory to install a think tank as a separate corporate body among the use of the government subsidies. Therefore, all major political parties have their own research institutes that function like think tanks. As stipulated in §38 of the Political Parties Act (Installation and Operation

11. See Choi (2007, pp.149~158) for a detailed explanation of the Samsung Economic Research Institute.

of Think Tanks), the political parties that are the target of government subsidy allocation according to the regulation for government subsidy distribution must install and operate a think tank as a separate corporate body in the central governing office in order to accelerate the development and research activities of policies, and the government may support the think tank's activities. Also, it is clearly specified and stipulated in §28.9 of the Political Fund Act (Limitation for Usage of Government Subsidy, etc.) that a political party that received current subsidies must use up more than 30% of the total current subsidy for the operation of the think tank. <Table 2-4> is the current state of think tanks of major political parties in Korea.

Table 2-4 | Think Tanks Established by Political Parties (2013)

Name of Institution	Affiliated Political Party	Founding Year	Human Resource	Revenue (100 million KRW)	Expenditure (100 million KRW)
The Youido Institute (YDI)	Saenuri Party	1995	Ph.D. Level 21 MA Level 23 Other 39 Total 83	106.6	98.0
Institute for Democracy and Policies (IDP)	New Politics Alliance for Democracy	2008	Ph.D. Level 8 MA Level 12 Other 31 Total 51	57.5	43.1
Progressive Policy Institute (UPPI)	Unified Progressive Party	2012	Ph.D. Level 3 MA Level 2 Other 3 Total 8	10.8	9.0
Progressive Justice Institute	Justice Party	2013	Ph.D. Level 2 MA Level 5 Other 5 Total 12	8.9	8.1

Source: Newsis 2014.2.18.

In the past, politics or elections in Korea has been more politician-based and region-based rather than being a match between policies. However, recently there has been a new tendency among political parties and candidates who develop platforms and align themselves with certain policies that reflect the demand of the voters, which is having an influence on the election results. Basically, the competition among political parties should preferably occur mainly due to differences in policies. Therefore, the role of think tanks of political parties is expected to substantially grow in terms of policy development.

Nonetheless, the think tank within the political party is not free from political control of the political party. Also, because these think tanks are basically considered a part of the political party, it is not easy to widely recruit researchers because some may feel uncomfortable being involved in a specific political party.

1.2.5. Independent Think Tanks

Lastly, the fifth type is the independent think tanks. These think tanks exist without a parent institution, having financial independence as well as operational independence. Representative examples are the Brookings Institute or the Heritage Foundation in the U.S., that raise most of their operational funds through donations to maintain independence and guarantee autonomy for their research. However, it is difficult to find these kinds of think tanks in Korea. There are many cases that, although it may look like an independent institution, in reality, the think tank may be depending on the funding from a specific institution.

The Korea National Strategy Institute (KNSI), the East Asia Institute (EAI), and the Hope Institute introduced in Choi (2007) can be considered as relatively similar to independent think tanks. The Korea National Strategy Institute (KNSI) advocates that they are to 'suggest policy solutions and national strategies based on substantial analysis in the fields of politics and diplomacy, economics and trade, and social integration. Through this, the KNSI contributes to the prosperity of a democratic community, realizes unification based on autonomy, democracy, and peace in the Korean peninsula, and ultimately aims to contribute to world peace.' The East Asia Institute (EAI) conducts research on Asian security, and issues on Japan, China and North Korea mainly focusing on diplomatic security and governance. Other than the abovementioned institutes, the Solidarity for Economic Reform or other research institutes established by an individual can be considered as think tanks pursuing independent forms.[12] <Table 2-5> illustrates these forms of think tanks.

12. Among the research institutes established by an individual that mainly conducts individual research are the KS Economic Research Institute (KSERI) founded in 2000 and the SDINomics founded in 2011. These two research institutes share similarities in conducting research on overall economic issues such as real estate, taxation finance, banking, and industry.

Table 2-5 | Think Tanks of Independent Forms

Name of Institution	Founding Year	Field of Research
Korea National Strategy Institute (KNSI)	2005	Politics, diplomacy, economics, trade, social integration
East Asia Institute (EAI)	2002	Diplomatic security, public opinion analysis, governance, human resource development
Hope Institute	2006	Social reform, social economy and social firms, citizenship education, citizen autonomy
Solidarity for Economic Reform	2006	Economic reform, economic democratization

Nonetheless, these are more in line with a Think Net, which consists researchers in universities or think tanks rather than being operated by many full-time researchers. Some even have to depend on a very small number of people. This is due to the fact that those institutes face financial difficulty to hire many full-time researchers to operate as actual think tanks. When the social demand for policy development in the future enables the emergence of independent think tanks run by spontaneous donations, the independent think tanks will be able to effectively compete with government-led think tanks in creating positive effects.

1.2.6. International Comparison Evaluation on Think Tanks of Korea

McGann (2014) creates the rankings not only of the think tanks all over the world, but also produces rankings according to region and research fields. Among the ranked think tanks, there are recognized Korean think tanks and research institutes, thus expectations for their future activity is growing.

First, when looking at the worldwide rankings, Korean think tanks appear in the list as follows: Korea Institute for International Economic Policy (54th), the Korea Development Institute (55th), East Asian Institute (65th), Institute of Foreign Affairs and National Security (79th), Center for Free Enterprise (103th), etc. When excluding the think tanks of the U.S., Korean think tanks appear in the list as follows: the Korea Development Institute (14th), Korea Institute for International Economic Policy (49th), Center for Free Enterprise (77th), and the East Asian Institute (84th). On the other hand, focusing on the East Asian region, the ranking appears among the Korean, Chinese, and Japanese research institutions as follows: the Korea Development Institute (1st), Korea Institute for International Economic Policy (5th), Asan Institute for Policy Studies (6th), Center for Free Enterprise (16th), East Asia

Institute (18th), Korea Institute for Defense Analyses (31st), the Korea Energy Economics Institute (38th), the Sejong Institute (40th), and Korea Institute for National Unification (42nd).[13]

Meanwhile, when looking at the rankings by fields of research the rankings are as follows; first of all, in the economic policy field of the home country, the ranking appeared as the Korea Development Institute (17th), Korea Institute for International Economic Policy (39th), and the Sejong Institute (60th). In the energy and resource policy field, the ranking appeared as Korea Energy Economics Institute (11th). In the diplomatic policies and international relations field, the East Asia Institute (55th). Also, the Korea Development Institute was (17th) the international development field, Korea Institute for International Economic Policy (15th) in the international economic policy field, the Science and Technology Policy Institute (33rd) in the science technology field, and the Korea Development Institute (19th) in the social policy field. Meanwhile, the Samsung Economic Research Institute (11th) was also listed among the think tanks established by private companies. The Korea Development Institute was (10th) and the Institute of Foreign Affairs & National Security was (33th) in the ranking for government-sponsored think tanks.

Among these rankings, the Korea Development Institute in particular is noted for its high reputation. The Korea Development Institute is ranked 55th in the world, 14th worldwide excluding the U.S., and 1st among the three Asian countries, Korea, China, and Japan. Even for the ranking categorized by fields it also has a positive reputation in many different fields as follows; 17th in the domestic economic policy field, 17th in the international development field, 19th in the social policy field, 10th among the think tanks, 25th for the degree of media utilization, 20th for public program focusing on policies, etc. When considering that the KDI is striving to be a general policy research institute, these rankings imply that the KDI is performing well enough to excel in its tasks.

1.2.7. Summary and Evaluation

The activities and roles of think tanks other than the government funded research institutes is evaluated to be inactive in Korea. Especially while think tanks normally mean the ones independent from the government, such as the Brookings Institute or the Heritage Foundation in the U.S., this situation of Korean-private think tanks being inactive-is a great contrast to that of the U.S.

13. The reason for the irrelevance among each ranking is suspected to be that the ranking was made according to survey results.

There may be several reasons to this phenomenon. Kang et al. (2006) mentions the major reasons to include, government-led development, regionalism in politics and lack of differentiation of policies among political parties, and vitalization of resistant civic movements, to name a few. We will explain the discussions from Kang et al. (2006) in further detail as follows.

First, during the economic development process, all decisions were made by a government-led scheme, which fundamentally disabled the possibility for groups other than the government to participate. Under the development state regime, the government led all sorts of plans' establishment and implementation in order to achieve swift and efficient decision making and execution. During this process there was a limited voice that differed from the government plans. During this time, most of the think tanks were founded by the government, and a large portion of their roles were to provide the government with logic concerning their plans for their policy.

Second, the unique political topography also acted as a factor. While the political structure was set and elections were held according to the political party or a candidate based on regionalism, the possibility for a policy to have meaningful importance was limited. Another reason for the weakened policy confrontation was that the ideological and political platforms between major political parties were not significantly different. Therefore, the utility of think tanks in putting more effort in policy development was hard to notice.

Third, as the demand for democracy grew due to economic development, civic movements by civic groups actively lead resistant movements as a result. These activities pivoted on the trials to eliminate the current negative custom. In other words, it used to have important meaning just by posing the question even without suggesting a substantial alternative solution, and this also had the role of executing a uniform function nationally. Thus, ironically, these invigorating civic movements in effect acted as limitations for think tanks' activities in pivoting policies.

This reasoning seems to be plausible to a certain extent, and thus, these factors seem to have complexly caused the depression of think tanks' activities. Especially the argument stating that there is a possibility that the unique political structure might have caused policy competition to become inactive is a reasonable argument, thus it should be paid careful attention.

However, the first diagnosis that government-led economic development acted as a factor for inactivity of think tanks requires a more careful analysis. It is in fact true that the economic development of Korea was led by the government, and that the government sponsored think tanks supported the logic for the policies of the government, which they also endeavored to develop. However, this cannot be the reason for the establishment or activity of private think tanks. Rather, noting that there was a shortage of the activities for think tanks considering the development stage and situation of Korea at that time seems more reasonable. In order for private think tanks to be active like in the U.S., a country must reach a certain maturity level in its politics, economy, society, and culture. Nonetheless, the situation in Korea before economic development was very difficult. People were suffering to even fulfill the basic conditions for survival. In this sort of environment, it is almost impossible to expect a high-dimensional level of activity from think tanks to prevail. Therefore, it seems unreasonable to think that other possible vigorous think tank activities might have been crowded-out because of policy decisions made by the government-led development scheme.

In fact, it is common for developing countries to establish and operate a government-led think tank during the early stages of economic development. Currently, the KSP projects, or the Knowledge Sharing Program projects, run by the KDI delivers the experience and knowledge on economic development methods. In this project, the establishment of think tanks to support economic development is also included. A good example is the research project regarding the sharing of the economic development experience with Saudi Arabia, operated by the Ministry of Strategy and Planning and the KDI (2013). Chapter 1 of this report discusses the methods for the establishment of a think tank supporting the economic development of Saudi Arabia. This report sets the KDI as a model case for the establishment of a tentatively-named think tank, the SDI, which will be supporting the economic development of Saudi Arabia. Through this, the report suggests detailed methods such as the purpose of the institution, structure, budget, research fields and its functions, type of researchers needed, and the scope of research support human resources needed.

2. Key Issues on Government-sponsored Think Tanks

2.1. Reason for Existence of Government-sponsored Think Tanks

The government needs an abundant amount of information and consultation when they take a leading role in order to push ahead for economic development. Nonetheless, it is indeed questionable if the government must directly establish affiliated think tanks to fulfill their need. For example, there can be various other solutions such as transferring that function to a purely private institution, or utilize a human resource pool of university professors, or utilizing government officials. In conclusion, at least under the condition when rapid economic development takes place, utilizing the government sponsored think tanks can be more efficient than any other alternatives. Below are the reasons for this analysis.

2.1.1. The Solutions by Utilizing Private Research Institutes

In the early economic developmental stage when the government leads the overall situations, it is quite difficult in reality for private research institutes to take on a similar role of government-sponsored research institutes. In Korea's case, in the 1960s and the 1970s, actual independent and professional private think tanks, such as those in the U.S., did not exist. Many think tanks were established during the 1980s and the 1990s. Nevertheless, they were directly and indirectly dependent on a parent institution, mostly for financial resources. These private research institutes primarily operate in the interest of the founding institution. Therefore, it is quite difficult to expect these research institutes to provide policy development or policy suggestions that seek the public's benefit. For example, it is difficult for these private research institutes to make suggestions that is highly beneficial for the society as a whole, but may have negative impact on the company's business. Likewise, there is a high possibility that the evaluation of a policy is done from a perspective that suits its own private interest.

In the long-term, many independent forms of think tanks may grow with great diversity. However, in order to become like that, the society and its conditions should become more mature. Thus, it is more reasonable to consider that at least during the early stage of economic development, it is very difficult for the abovementioned situations to ideally be achieved.

2.1.2. Solution by Utilizing Private Researchers

Next is the possibility of utilizing researchers such as professors in universities to transfer the policy research function to, without creating a research institute of their own. This solution, nonetheless, is also realistically difficult to pursue during the early stages of economic development.

First of all, when this method is chosen, a trade-off between autonomy and utility may occur. Let's say the government had a university professor to be in charge of policy research in order to respond to an issue. This professor, when looking at the relationship with the government offices, is considered an individual researcher from outside the institution rather than a member of that institution. If there is a policy criterion the government office prefers, and if the researcher is aware of that matter, it is not easy for the individual researcher to totally neglect this aspect. In other words, there lingers a possibility for the researcher to lack research autonomy. However, if the researcher belongs to a specific research institute, the autonomy of the research can be backed up by the unilateral standpoint of the research institute the researcher belongs to.

In contrast, let's say the government office perfectly guarantees autonomy, considering these possibilities. In this case, a preferable research outcome may be produced, nonetheless, the researcher may disregard the demand of the government office and only care about his or her own interests or may even produce research outcomes that does not have great realistic utility. This is because, although the research topic may be of an identical issue, a policy research is quite different from an academic research in many aspects. While policy researches relatively focus on applicability and practicality, an academic research tends to focus on the preciseness or the conclusion of the methodology itself compared to the existing research although it may have less applicability to the real world, it is still considered to be valuable. Therefore, when given perfect autonomy, the research outcome may lack realistic utility. Especially when the researcher who is offered a policy research has never conducted such research and has only conducted academic research, the problem may be aggravated.

Related to this, the selection of research topics itself can also be a problem. In government sponsored think tanks, not only the policy suggestions on current issues, but also forecasts and solutions for potential future problems that are likely to occur are also touched upon through anticipatory research. When these kinds of research are given as a task to a researcher who is a professor, the same problem mentioned above may also occur. Research on some topics, due to the fact that theoretical and factual discussion has already been settled in academia in the past, is not actively conducted anymore. For example, the taxation issue, which is one of the topics of the traditional finance field, is not considered an active research topic in academia nowadays. That is because most of the issues in that field have already accumulated a great deal of research outcomes in the academic sense. It is the same for the income distribution issue, although recently it is under the spotlight once again thanks to Piketty (2013). However, these topics are still of great importance for policy matters, because although there are various existing theories academically, analyses or evaluation on each individual situation or policy is still extremely important in reality. Therefore, even when considering the cases of anticipatory research, it may be inappropriate to assign the task only to an individual researcher.

Furthermore, there is a high possibility that the demand for policy research may not be totally fulfilled only by individual researchers in universities. For a university professor, these kinds of policy research are extra tasks other than their actual occupation of educating and conducting academic research. Therefore, it is very difficult for these people to apply a steady and continuous effort on the policy research. Moreover, as aforementioned, it may be even more difficult for them to maintain their unilateral stance, as well as to maintain their independence and autonomy.

Lastly, another problem that may prevail considering the special case of being in the early economic developmental stage is the quality of human resources. In Korea, there were not many economists who worked in universities or graduate level (MA or Ph.D. level) human resources during the early 1960s when the government was starting to implement economic development plans. Also, the existing human resource at that time, including university professors faced much difficulty in providing practical advice on tasks such as the establishment of the economic development plan. These people mostly studied German style economics of the historical school of economics, therefore, they were not sufficiently capable of establishing economic development plans using factual research based on statistics. In the long-run, the nurturing of a workforce by the private sector and receiving consultation by these people would have been likely, however, during the early stage of economic development, the direct recruitment and nurturing of these sort of human resources by the government can be inevitable.[14]

2.1.3. Solution by Utilizing the Workforce in the Government Sector

Lastly, let us think about the method where policy research is assigned to government officials directly. Policy research differs from the daily tasks of government officials in many aspects. Thus, in order to nurture reliable research ability, academic training of the level of a Ph.D. holder or similar is necessary. Although there are a few government officials who obtain a Ph.D. through academic training programs provided by the government, only a few people are willing to participate, and even after they obtain their Ph.D., in most cases, they return to their ordinary tasks rather than being involved in the actual policy research. In light of these points, in order for the government to conduct policy research using the workforce among government officials, the government must eventually directly recruit new researchers who are capable of conducting such research.

However, this method consists of two fundamental difficulties. First, when employed as a government official, their salaries are determined according to government officials pay system. Thus, there is a high possibility that the salary level may be insufficient in recruiting highly qualified researchers. Highly qualified human resources, especially the ones holding

14. See Kuznesov (2013) to take a closer look at the importance of the role of intelligent people of the home country's nationality residing abroad when considering the economic development of developing countries. Furthermore, regarding the Korean case, it will be explained in more detail in Chapter 3.

a degree in economics, may have other more lucrative options to choose from in terms of income or working environment. This will result in low satisfaction for the government official's ordinary salary level. Eventually, when the policy research is to be conducted internally, there is a high possibility that the assigned researchers may not be qualified enough, and this will also result in a low quality research outcome. Second, when the research workforce becomes included in the government organization, it is difficult to guarantee the autonomy and the independence of the research. Currently, even the government-sponsored research institutes outside the government office face problems of being violated of their autonomy and independence due to government influence. If the research sector is included inside the government organization, these sorts of potential problems will be magnified to a greater extent. This is because, realistically, it will be very difficult to be involved in research activities independent from the boss's opinion or the demand and preference of the organization as a member of that organization.

2.2. Anticipatory Features of the Research Activities of Government-Sponsored Think Tanks

The research activities of government-sponsored think tanks can be categorized into many forms according to each standard. Among the many standards, one can be whether the research is of an anticipatory characteristic, or of a posteriori characteristic. An anticipatory research can be defined as a research anticipatorily providing responsive solutions to a potential issue that is likely to occur by forecasting future economic and social change. The Five-Year Economic Development Plan during the developmental era, or the 'Vision 2030' conducted in 2006 by the KDI is representative examples. In contrast, a posteriori research can be defined as a research posteriorly offering a responsive solution to a pre-existing issue or developing the logic for government-led policies that have already been implemented.

While we can leave the policy research on current issues out of the discussion due to their obvious necessity, the dilemma of which type of research method to emphasize the importance of between the anticipatory research method and the posteriori research method, when it comes to the research methods to be conducted by government-sponsored research institutes, becomes an extremely important selection problem. This is because the basic direction of the research activities or the operational criteria of the research institute varies according to which method the emphasis goes to. For example, if the emphasis is set on the anticipatory research, the researchers can conduct research similar to the basic research on the research topics that may lack timeliness for the time being but will be very important in the long-run and will be highly applicable. In contrast, if the emphasis goes to the posteriori research, there is a high possibility that the types of research mentioned above may be relatively considered as less important.

2.2.1. Anticipatory Research

Although this may be a fairly obvious and fundamental statement, government-sponsored research institutes must find balance between the two types of research. This is because, despite the difference of the level of importance, both types of research are needed. However, considering the many environmental changes, there should be more emphasis on the anticipatory type of research. For example, Korea is facing the phenomenon of low fertility and an ageing society at a rapid pace starting from the 1990s, thus Korea is expected to experience hardship to achieve further economic development. However, this problem has not been predicted in an appropriate manner, nor was it discussed thoroughly until recently. Surprisingly, even during the 1980s a birth control method was being developed. As a result, a national responsive method has not been carefully developed. Many recently conducted researches related to the ageing society and low fertility tends to be of a typical posteriori type of research. This is a good example of a huge national social cost induced when anticipatory research is not adequately conducted. The belated response to a certain social issue is likely to induce a larger cost than taking immediate measures by predicting the social change in advance to prevent the aggravation of those kinds of social issues.

Considering these aspects, the importance of anticipatory research, which predicts the structural change of the political, social, economic, and cultural aspects and also comes up with alternative policy solutions on a potential problem, is emphasized. Also, considering the situation where all sorts of changes occur in rapidity due to demographic change and the development of IT technology, the importance of anticipatory research is magnified to a greater extent. Therefore, even though it lacks timeliness to a certain degree, the percentage of basic research on various topics must be increased as an investment for the future. Since the government-sponsored research institutes are established in order to pursue the public's welfare and overall benefits for society without seeking their own profit or supporting a specific group's interest, they are in an appropriate position to pursue such kind of research.

2.2.2. Posteriori Research

Meanwhile, one must be more careful when speaking of posteriori research providing posteriori justification or logic for government-led policies. The government-sponsored think tanks can contribute to solving a problem by taking a leading role when the government choses an appropriate tool to pursue a policy goal and now needs a detailed process to practically implement the policy, or when the government policy failed to be adequately delivered to the citizens. Thus, unnecessary disputes or inefficiency occurs. This is indeed a necessary and desirable activity. However, when a specific policy is implemented for political reasons, even in situations where the validity of the policy goal or the policy tool is not precisely verified, government-sponsored think tanks posteriorly providing justification for the government must be negated. From the stance of the policy authority, they will strive to find justification for their policies as a high priority. Therefore, they may have strong incentives to develop such evidence and logic through the government-sponsored think tanks. Nonetheless, since the government sponsored think tanks are fundamentally established for the nation's and citizens' benefit rather than for the government, one must pay close attention to the fact that posteriorly developing validation for the policies unverified of their validity in an appropriate way are included in the activities that goes against the original purpose of its foundation. This is also important for enhancing the government-sponsored think tanks' independence and autonomy. Thus, there even is a need for the government to refrain from expressing their preferred ideas through government-sponsored research institutes.

2.3. Organizational Structure of Government-Sponsored Research Institutes

Most organizations have a tendency to increase their size. Also, as the scope of the economy becomes enlarged and the society becomes more complex, many functions or activities that were less important in the past now become more necessary. In effect, recently there is a tendency for the government-sponsored think tanks' organizational structure to expand, and departments within the think tanks are transforming into special centers that are mainly in charge of specific tasks. For example, for the case of the KDI, there are additional centers other than the main office, such as the Economic Information and Education Center (EIEC), the Public & Private Infrastructure Investment Management Center (PIMAC), Center for International Development (CID), and the Center for Regulatory Reforms, which was newly established very recently. The Korea Institute of Public Finance (KIPF) also created the Center for Performance Evaluation and Management (CPEM), Research Center for State-Owned Entities (SOE), and the Government Accounting and Finance Statistics Center (GAFSC), in addition to the main two offices for research on taxation and financial affairs.

In fact, it is not easy to verify whether the activities of the abovementioned centers are perfectly aligned with the original purpose of their foundation, and actually it is not included within the scope of their research. However, a fundamental discussion related to the phenomenon of these departments with additional functions transforming into separate centers can be unfolded.

This may be an obvious thing to mention, but the most important standard for assessing the validity of establishing a new department is how well that department's operations matches the purpose of its establishment. If the recent trend of newly established research centers-in order to adequately fulfill the original function assigned to the institution, the institution needs additional departments, and those departments transforming into additional research centers – is proved to be efficient, then the validity will be acknowledged. Nevertheless, if those additional research centers' establishments were only to enlarge the government office's size due to easy manageability for the government even though they are not really fulfilling their original tasks, combined with the incentive of the government, then these new establishments must be prevented. If the proportion of the departments irrelevant to the original basic tasks grows, the identity of that government office itself may be jeopardized. That is to say, when the additional task function becomes larger than the original task function when the organization expands, it essentially is the same as putting the cart before the horse.

What is more important is that the research institute becomes function oriented, thus weakening the fundamental function of being a think tank. In other words, the think tanks established to become the "brain" might merely become the "small hands." This is because the government has the incentive to allocate their tasks to the research centers due to reasons such as lack of human resource in their own offices or administrative reasons disallowing that task to be held within the government offices. However, this should be prevented since this will hinder the autonomy and independence of the research institute and by invalidating the fundamental intention of being a think tank by functionalizing them. Especially when those functions are executed due to political needs rather than for the nation's long-term betterment, when the government office changes, that specific department is in danger of being shrunk or even closed. If this kind of incident repeats, then it will induce national inefficiency. Therefore, an indiscriminate establishment of new research centers apart from the original tasks must be prevented. When the government feels the need to implement a specific practical function, fundamentally and preferably, the government should have that task stay within the government office, or establish another special task force team to operate that function.

2.4. Conclusion

To sum up the above discussion in short, We would like to point out the following. First, during the early stage of economic development, the government-sponsored think tanks can greatly contribute to national economic development. During this time, transferring the function of the government-sponsored think tanks to the private sector or researchers or professors of universities is realistically difficult, not to mention holding the task within the government office. Even if it is possible, there will be a larger portion of side effects. Meanwhile, considering the characteristics of the research, it seems to be preferable to have priori and anticipatory research to be the main research method. Also, due to the fact that the social cost will be greater when a meticulous responsive measure is not ready in advance, and also because the economy and society are constantly undergoing change, it is important to enforce and conduct extensive fundamental research with priori characteristics. Meanwhile, we must think twice when trying to develop posteriori rationales to support insufficiently verified government policies. Also, establishing new departments in the form of research centers that only execute functional tasks, far from handling the original tasks a research institute should be involved in, should be prevented – because this is merely a method of expanding the government office size, which will become a hindrance to the fundamental significance and identity of think tanks along with harming their autonomy and independence.

The government-sponsored think tanks of Korea have many unique characteristics in many aspects. Basically, their establishments were led by the government, to pursue public welfare and social benefits, while legally existing outside the government to guarantee institutional autonomy and independence. Meanwhile, as the government-sponsored think tanks should serve the citizens, they should also have a close relationship with the government. Therefore, if there is a difference between what the citizens want and the government wants, or if there is a gap between what is wanted by the citizens or the government and what the research institute can afford to do, many complex issues will arise. These problems are not simple, which will require thorough analysis to solve.

Also, there is an important thing to consider for this sort of discussion. That is, government-sponsored think tanks are institutions working for the citizens or the nation, not for the government. The fund given to the government-sponsored think tanks comes from the national tax, not from the government. Also, the autonomy and the independence of these think tanks exist ultimately in order to conduct research needed for the nation rather than to benefit the institution itself. Thus, when discussions are being made on the government-sponsored think tanks, this fact must be acknowledged as the dominant principle.

Chapter 3

Case Study: The Korea Development Institute

1. Research and Consultation
2. Human Resource and the Organizational Structure
3. Establishment of Affiliated Centers and Expansion of their Function
4. External Relations

Case Study: The Korea Development Institute

As of 2014 there are 23 government sponsored research institutes under the National Research Council for Economics, Humanities and Social Sciences (NRCS). There are many other research institutes established by the central or local government that conduct research related to government policies. In order to investigate how these research institutes operate and what kind of progress they are making, we will take a look at the history of the Korea Development Institute (KDI).

The KDI is a comprehensive economics research institute that was founded in 1971 as a government think tank. It has greatly contributed to the development of the Korean economy for the past 40 years and is still continuing its important role. According to the "Think Tanks and Civil Societies Program (TTCSP)" from the international relations program of the University of Pennsylvania in the U.S., which investigates think tanks around the world and announces their rankings, KDI placed 58th among the research institutes of the world in 2013, and 15th among non-US based organizations.[15] This is one of the cases where the KDI's lofty reputation was recognized not only in Korea but also worldwide.

The KDI was founded in 1971 to conduct policy research needed for economic development, and they have been evaluated as to having successfully achieved this goal. The case study on the KDI will suggest insights to understand what kind of research should be conducted in order for a government-sponsored think tank to contribute to national development, and how qualified human resources should be recruited and how the organization should be operated to fulfill these tasks.

15. See Section 1 of Chapter 2 for reference.

Second, the history of the KDI helps shed light on the procedure of the evolution and interaction of the think tanks between the policy environment or the changes in socioeconomic situations. The KDI is the oldest currently existing think tank in Korea. Thus, the KDI has gone through many stages of economic development compared to other think tanks. And during that process, they have experienced numerous internal and external evolutions in order to fulfill policy tasks the government assigned them. Taking a closer look into this process provides more than just intuitive and obvious information and the basic approach about what a think tank should be or what the relationship between the think tank and the government should be, it also provides a wide range of understanding about how these organizations should adapt to new changes and operate to contribute to socioeconomic development.

Meanwhile, the KDI is unique compared to other think tanks in Korea. Its unique trait is that it is in fact a comprehensive research institute. Most think tanks under the regulation of the NRCS are established in order to conduct research in specific fields such as trade, industry, finance, education, environment, and health. Compared to this, the scope of the research topics of the KDI has varied across many fields since its foundation, and as a matter of fact, today they touch upon all fields of study related to the Korean economy and society. In the past, when there was not many think tanks, it would be natural for a research institute to handle a diverse array of research fields. However, would it still be reasonable to do so these days when there are many specialized research institutes with dozens of researchers? If so, what may be the reason for their existence? Answering this question will provide many implications for the reason for being think tanks.

Lastly, investigating the many aspects of the KDI in a comprehensive and detailed manner will help developing countries that plan to achieve systematic national economic development plans. Countries that plan to systematically execute national economic development plans-such as Saudi Arabia, Myanmar, Algeria, and Kuwait-are trying to or have already established their government sponsored research institutes, considering the KDI as their model. This demand is highly expected to continuously grow.[16] In order for establishments of think tanks such as the KDI to not only look like a think tank but also truly and successfully operate as a think tank, taking a closer look at the history of the KDI's development will be very helpful. In this context, this paper is expected to contribute to the economic development of developing countries as well.

16. See Lim et al. (2012), Kim et al. (2013), Chun et al., (2013).

Taking into consideration these purposes, we will further explain the following; first, we will explain the research performance of the KDI, and then as a source of this successful performance, will explain in more detail the securing of qualified human resources, the internal organizational structure, finance, and government relations.

1. Research and Consultation

1.1. Three Directing Points of Think Tanks

The basic function of think tanks such as the KDI is to conduct research that contributes to the government's policy making and its implementation in order to ultimately contribute to increasing the nation's welfare. To achieve this goal, the process and progress of research should ideally have the following characteristics: expertise, independence, and integrated insight.

Expertise means that the researcher or the think tank itself must have professional in-depth knowledge and analytic ability on issues they are in charge of conducting research on. This ability is a necessary condition for the researchers to have. However, the researchers in think tanks, compared to other researchers in the same field such as professors belonging to universities, must be able to conduct research and derive at statements on topics that are able to be practically applied to policies, as well as having professional knowledge on their field of study. Moreover, these research outcomes must be practically helpful for the personnel in charge of the relevant task in the government. Nonetheless, to have the expertise of combining the advantages of both academia and government is not an easy thing to do. In order to nurture these kinds of human resources, efforts by researchers as an individual, as well as those by the organization, are necessary.

Independence means that the pressure outside the institution-by the government or a private entity-or the interests of the institution itself do not affect the process or the result of the research being conducted within the think tank. During the selection of the research topic or the procedure of the research, it is natural to collect various opinions from inside and outside the institute. Sufficient discussion also plays a crucial role in deriving the research outcome. Nevertheless, if the research outcome is surely a rational conclusion, to have been derived from sufficient analyses and inspection, then that result must never be changed due to an external pressure or an internal interest. Moreover, the research must not artificially support the client's position or opinion.

An integrated insight is when research is done on a specific topic the researcher must consider the overall welfare of the nation. For example, when there is an issue such as the opening of the Korean agricultural and marine products market, the think tank must not view the problem as one of the interest groups, such as the farmers who may be the victim if the markets were to open, manufacturers abroad who may profit as a benefit in return, or the consumers who may benefit from cheaper agricultural products, to name a few. Rather, the think tank must view the problem in a long-term integrated viewpoint, to analyze what profit and loss the nation as a whole may undergo, and provide suggestions for the policies.

These three conditions tend to be complementary in many cases, and it is quite difficult to explain separately. For example, for a think tank to express their opinion on a certain policy solely for the welfare of the nation by overcoming the pressure or criticism from others, it is merely impossible to do so without the professional knowledge to overcome these hardships and to persuade them. In this aspect, expertise is close to being a necessary condition for independence and integrated insight. On the contrary, an expert's argument that lacks integrated insight may not be able to provide the necessary information for the nation's economy. Therefore, this can also be evidence of lacking a higher dimension of expertise.

As mentioned above, if one of the three factors is missing, others may not be realized in an appropriate manner, thus making all three complementary to each other. Even so, one of the three factors does not represent or imply any other factor, thus it is reasonable to consider the three factors separately.

To pursue these three virtues is very important for the research of the KDI, and many researchers of the KDI have put much effort into upholding this virtue when conducting their research. Nevertheless, which of the three virtues has been in more demand by the consumer of KDI's research outcomes, or ultimately the nation as a whole, and realistically the government branches and the government officials, differed according to the chronological change. Also, the unique situation of each period brought changes of relative importance for each factor. Going forward, while we will explain how the research has been conducted since the time right after the KDI was founded until recently in general, we will also seek to identify that specific change during the process.

1.2. Basic Research

Formally, the research conducted by the KDI can be roughly categorized as research reports, spot assignments, and other publications. To simplify according to the recent standard, a research report may refer to a written report consisting of an in-depth research result on a specific topic conducted for a period of time of about six months to one year. A spot assignment, or a short-term assignment, refers to submitting a policy suggestion through organizing the issues for a short period of time on a specific topic, followed by a request from the government. Mostly, these are published as short reports written in summary form. Other than these, there are journals in the form of periodicals such as the KDI Journal of Economic Policy, KDI Review of the North Korean Economy, KDI Monthly Economic Trends, and the KDI Economic Prospects, and pamphlets such as the KDI Focus or the KDI Policy Forum. Publications of various forms are being created as 'other publications.'[17]

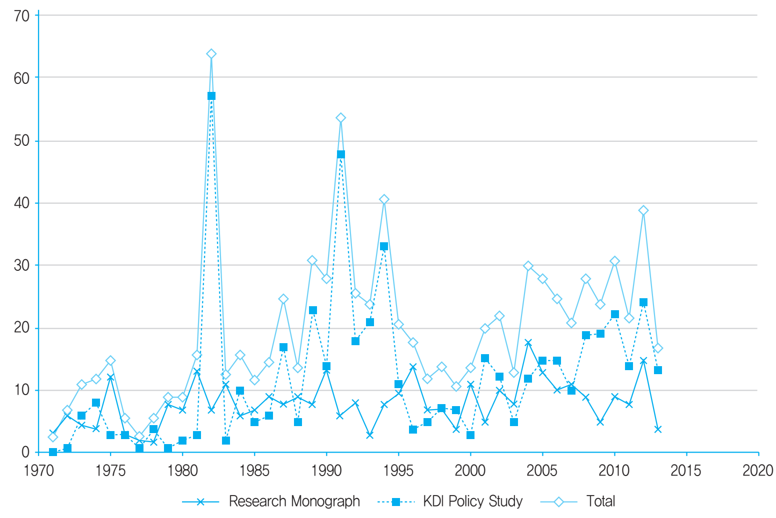
In this section, we will touch upon the research projects of the KDI that focuses on the research papers. In fact, the method of writing and publishing the research papers has changed over the years, thus it is not a simple task to count the research papers among all the publications. Regardless, when counting the number of research papers considering the limitations, there are a total of 871 research papers published in the Korean language from 1971 until 2013. [Figure 3-1] indicates the tendency of research paper publications.[18]

Below, we will explain the contents of the research papers categorized by major topics. Shot-term assignments are mostly based on the contents of the research papers, thus it can be considered meaningless to look through the topics of only the Shot-term assignments. Nonetheless, since the Shot-term assignments may have important discussion points regarding the operation of the institute or the utilization of the researchers, we will explain those separately in the latter part of this paper.

17. The name of the research papers has changed over the years, yet, we will explain here using the most recent name. Also, sometimes these vocabularies are used in a rather different meaning internally. Nevertheless, I will simplify the usage of the vocabularies for convenience. In addition, the publications listed above are mainly from the main office of the KDI, and many other publications of its affiliated institutions are not included.

18. Research papers are again categorized into a policy research series, or policy briefs, and ordinary research papers. The policy research series is a research paper of approximately 40~50 pages or equivalent to a thesis paper that focused on a single topic. A 'research paper' consists of one big topic, as a combination of many thesis papers, which are approximately 400~500 pages long. Below, I will use the word 'research paper' to refer to both types of papers for convenience.

Figure 3-1 | The Number of KDI Research Paper Publications in Korean, 1971~2013



Note: The total number of research papers published from 1971 to 2013 is 871.
Source: Internal Data of the KDI.

1.2.1. The Economic Development Plan

After the military revolution in 1961, the revolutionary government considered economic development as their first priority and focused on such issues. In effect, the government implemented the Five-Year Economic Development Plan in 1962, which was the economic development plan divided over a five-year timeline.[19] The first plan that went into effect from 1962 to 1966, utilized the plan established by the former government, thus it was not a big deal to implement the plan. However, the Second Five-Year Economic Development Plan had to be established by the Economic Planning Board founded in 1962. Therefore, recruitment of a professional workforce was a crucial issue to achieve the successful establishment of the plan.

At that time, the Economic Planning Board solved the abovementioned problem by utilizing the researchers from abroad and a few domestic economists. Thus, they were able to establish the Second Five-Year Economic Development Plan to be implemented since

19. See Lee (2006) and Park (2007) for more information related to the early history of the Five-Year Economic Development Plan.

the 1967. However, the utilization of the researchers from abroad had many limitations, therefore, they started to focus on recruiting domestic researchers with expertise. It is stated in Chung (2002, pp.16~38) that the Korea Development Institute was established due to these efforts, to recruit human resources and to utilize them.

Considering the background of its foundation, we can simply think that the major role of the KDI was to establish the economic development plans. However, interestingly, there is no trace of a comprehensive research paper discussing the planning of the economic development plans by the KDI. Moreover, although it is true that the KDI has greatly contributed to the establishment of the economic development plan itself, when looking at the list of publications, there seems to be many limitations to simply argue that such research was the KDI's most representative achievement.

The founding year of the institute accounts for the reason. The KDI was officially able to participate in the planning of the economic development plans from the Fourth Five-Year Economic Development Plan, which was implemented in 1977.[20] However, at this time, the Economic Planning Board already had the experience of establishing and implementing two sets of economic development plans. Thus, it seems that the planning itself was in fact not that difficult.

The objective of the KDI, related to the establishment and implementation of the economic development plans, was focused on building basic research to enable these plans to have substance and practicality, and implying that the research outcomes will directly and indirectly effect the establishment of the economic development plans. For example, the KDI published the research paper titled the "Growth Strategy for the Overall Resource Budget" the next year, in April 1972.[21] This report was requested by the Economic Planning Board to be written by the KDI to "use as a reference to plan the Third Five-Year Economic Development Plan's Second Year Overall Resource Budget," and was also written to express the opinion on the budget planning method based on the Economic Forecast of the Year 1973. This report of 20-or-more pages was written by a total of six fellows, including the KDI President at that time, Mahn Je Kim. These fellows also wrote separate reports on major issues on macroeconomic forecast, financial expenditure, income from tax, and exchange rate around the time they published the above mentioned research paper, of which the contents were used as the basis for the report published in 1972.[22] These reports all

20. See Chung ed. (2002), pp.141~154 regarding the concrete participation method.

21. KDI (1972). Refer to the Message for Cooperation attached before that report regarding the background of writing the report.

22. Kim, Song, and Song (1972).

presented concrete data through metrical analysis, thus providing quantitative information necessary for establishing and implementing the economic development plans.

Along with the publication, a forum to discuss such results was held. The Economic Planning Board held the Economic Policy Conference for the Fourth Five-Year Economic Development Plan and the KDI was in charge of the actual coordination of the conference. The First Conference held on December 26th and 27th, 1974, while many government departments and related persons from the private sector as well as the Economic Planning Board were present, President Mahn Je Kim, Dr. Heeyhon Song, and Dr. Pal Yong Moon made presentations related to the economic development plans, and discussions were made based on those presentations.[23] Through these discussion sessions, opinions from each government branch were collected and mediated by the KDI, handling the operational part of the conference. This greatly contributed to the establishment of a more realistic plan.

Therefore, the major role the KDI played during the early times of its foundation related to the establishment of the economic development plans can be summarized as conducting research on basic analysis needed for the plans established by the Economic Planning Board to be applied to the real economy and providing relevant consultations. Afterwards, the KDI was in charge of supporting the economic development plan establishments of the Economic Planning Board until the last Five-Year Economic Development Plan was implemented in the 1990s.

1.2.2. Input-output Analysis and Related Research

It was very important to create and analyze the input-output table in order to establish the economic development plan, as well as to identify the overall trend of the national economy as a whole. The input-output table (Leontief table) is a matrix that represents the relation of how many units of output of an industry is consumed by another industry for their output production, and how many of a specific industry's output is consumed by other industries or end-consumers. In other words, it is a general model that shows how different sectors of a country influence each other. This analytic technique first proposed by Wassily Leontief during the 1930s was the General Equilibrium approach, which helped identify the influence of a specific policy or an externality to each economic sector. This has been widely used for economic analyses all around the world.[24]

23. Kim (1974), Moon (1974), Song (1974), Korea Development Institute (1975). Dong-A Daily News 1974.12.26.

24. Leontief (1941, 1953).

The inaugural input-output table, which officially declared having the Korean economy as the target, was Kang (1957). This input-output table consisted of 19 sectors, with the base year of 1957, was utilized as the basic data for the Three-Year Economic Development Plan. Afterwards, the Bank of Korea started to produce and announce the input-output table in earnest since the year 1960.[25]

At the KDI, Song (1973) was the very first to have conducted the analysis using the input-output table. In this research, a long-term tendency prediction until the year 1981 was proposed on the major macroeconomic variables such as the aggregate income, investment, export, and import by connecting several years' input-output tables and deriving a tendency of those years.[26] Afterwards, Kim and Hong (1982) carried on with similar tasks. These analyses, due to their attributes, served as important information in establishing the economic development plans.

Economic analyses using the input-output table is still considered a very important axis of research for the overall KDI research projects.[27] For example, Kim, Lee, and Kim (2002) and Kim et al. (2012) utilized the input-output table to conduct an analysis on the Growth Accounting of Korea, and Kim (2003) connected several input-output tables to analyze the change of the industrial structure of Korea. Meanwhile, it is convenient to use the Effective Protective Rate estimation to figure out what kind of protective effect the tariff imposed on various products could have. The KDI used the input-output table for their continuous estimation of the Effective Protective Rate throughout the 1970s and the 1980s.[28]

Also for the Preliminary Feasibility Study that is conducted by the Public & Private Infrastructure Investment Management Center (PIMAC) of the KDI, the role of the input-output table analysis is immense. The ripple effect of a public investment in a specific

25. The Bank of Korea made the input-output table in 1955, but did not make official announcements. Kim (1980), p.7, Footnote 1. However, this table was later used in various research papers of the KDI, etc.

26. When establishing the economic development plan, it is possible to consider two kinds of approaches; one being the macroeconomic model approach which is to mainly focus on the macroeconomic variables, and the input-output model analysis which focuses mainly on the relations among each economic sector. According to Song (1973, pp.16~19), the Second Five-Year Economic Development Plan had been established focusing on the input-output table, while the Third Five-Year Economic Development Plan was established focusing mainly on the macroeconomic model, and during the process of its implementation, an input-output analysis was made in order to supplement this plan.

27. The KDI builds their own input-output table database and conducts analyses. See Kim (2011) for more related information.

28. For the Effective Protective Rate estimation research, there are Nam (1981), Kim (1980), Kim and Hong (1982), Yoo, Hong and Lee (1993), Hong (1992, 1997), Yoo (2005), etc.

region on that region's economy is a critical criteria for deciding whether to execute a project or not. In order to figure out such ripple effects, regional input-output tables are utilized, and such results are applied to all preliminary feasibility studies.[29]

Compared to the past, research on the input-output table or analyses on its utilization are not actively conducted anymore in academia these days, while most of the analyses are conducted by the policy research institutes such as the Bank of Korea or the KDI. This is a significant factor as to the reason for why think tanks exist. Due to the nature of academia to pursue the creation of new knowledge, there is a tendency to not engage in new research attempts in the fields of study that have sufficient amount of research that has already been conducted. As a result, even though the government is in need of a workforce with that field's expertise, in many cases, the adequate supply of a qualified workforce with relevant professional knowledge is insufficiently in academia. Nonetheless, a government official studying by oneself the methodologies, such as how to analyze the input-output table in order to conduct the analysis, can be troubling, not only for the government officials in Korea, but also for the government officials of many other countries due to the characteristics of their tasks or in the sense of continuity. Therefore, having think tanks can be an adequate system for the government to solve the problem of possessing and reproducing the type of knowledge the government is in need of. Not only the input-output analysis, but also the major tasks of the KDI, such as economic forecasting and macroeconomic finance research, which will be explained below, are valuable roles think tanks can play.

1.2.3. Economic Trends Analysis and Economic Forecasts

The KDI, since its foundation, was in charge of tasks such as figuring out economic trends and presenting a forecast by systematically analyzing major macroeconomic variables-such as the GDP, price fluctuation, and the unemployment rate-related to the nation's overall economy. Such tasks were executed along with in-depth analysis of the macro-economy, and the development of the models necessary for forecasting. Soon after the foundation of the KDI, Dr. Heeyhon Song created the first ever macroeconomic model in 1971 and utilized it for economic forecasting.[30] During the same period, Dr. Mahn Je Kim, Dr. Heeyhon Song, and Dr. Kwang Suk Kim estimated the money demand function.[31] Till this day macroeconomic analysis and forecasting continues to be the main functions of

29. See Section 3 regarding the Public & Private Infrastructure Investment Management Center (PIMAC) and the preliminary feasibility study.

30. Song (1972).

31. Kim, Song, and Kim (1972, 1973).

the KDI, and related research reports published by the KDI are so copious that it is nearly impossible to cite all of the publications one by one.[32]

Based on these analyses, the KDI regularly and officially announced the macroeconomic analysis results, in order to provide important information necessary for the economic activities of private firms and citizens, not to mention the government. In May 1982, the first 「KDI Quarterly Economic Forecast」 was published, and this publication is still in circulation today. Also, the KDI publishes the economic trend report listing the major economic indices, thus investigating the tendency of economic change and providing information to citizens. Whenever a macroeconomic trend should be figured out by the government or the media, they contact the KDI for consultation.

Analyses and forecasts of the macroeconomic trends require both ordinary tasks to continuously figure out the tendency of change of macroeconomic variables, and the ability to analyze these variables. Also, the macroeconomic trend cannot be analyzed merely through several specific variables – an in-depth understanding of a combination of many different variables is needed. Therefore, the collaboration of fellows to continuously and meticulously figure out data from each sector is a must. Due to these reasons, the KDI macroeconomic forecasting continued as a "Tendency Forecast Team" consisting of many Ph.Ds. and a research support staff. In order to produce sound macroeconomic forecast results, the cooperation among the teammates in charge of each economic sector is necessary. Such a collaborative system has been the established working culture at the KDI, which is one of the important assets that no other institution can easily mimic.

The macroeconomic forecasting function of the KDI has been, as mentioned above, one of the most important axis for the KDI since its foundation. Recently, many institutions are establishing and announcing macroeconomic forecasts. Therefore, the importance of the KDI's economic forecasting has been relatively weakened. However, even among many other institutions, the economic forecast is announced by the KDI prior to any other institution. Afterwards, there is a tendency that official announcements made by other institutions based on the KDI's forecast results are released by adding implications through their analyses and adjustments to the results. It is also common for even the media to consider the KDI forecasts to be more important than those of any other institution.

Considering these aspects, the KDI macroeconomic forecast is still recognized as having an important meaning to the Korean economy. Also, the KDI closely shares information and opinions on macroeconomic information with international organizations, such as the

32. Lee et al. (2011) is the most recent macroeconomic model based on the DSGE model.

IMF or the OECD, thus providing information on the Korean economy for forecasting the world economy, as well as figuring out trends in the world economy to create responsive or necessary countermeasures.

1.2.4. Long-term Forecast and Plans

If a macroeconomic forecast is a prediction of the economic trend for a short-term, or a six-month to one-year period, the long-term economic forecast is a prediction of a ten-year or a longer period of time to design the future path of economic growth and related policies. One of the most important roles of think tanks is to suggest a long-term forecast and also suggest a policy solution on current issues based on the forecast. When the ministries or the National Assembly is faced with an urgent issue and is unable to look at the big picture, or look through the policy's overall direction, a think tank will not only have to support the short-term issues the government is currently facing, but also take a step back and evaluate the problems and make suggestions from a long-term comprehensive point of view. Through this, the think tanks must take charge of their original function of leading the policy to its correct direction.

Indeed, the long-term forecast should all be blended in all reports and research papers published by the institute even though it may not be a special report on that topic. Nevertheless, apart from this, each research institute must publish reports on overall forecasts so that they can enlighten the related persons with information on the trend of a specific field. In the case of comprehensive research institutes, such as the KDI, there are greater obligations to fulfill this function than any other research institutes. Furthermore, the KDI must suggest the direction and come up with strategies of long-term development for the overall society and the economy of Korea, not specific to a certain field.

For the KDI, long-term forecasts were made since its foundation. In April 1973, President Mahn Je Kim made a presentation in Washington in the U.S. about the future of the Korean economy. Also, in October of the same year, he made another presentation titled "The Korean Economy of the Year 2000" at an international conference held in Seoul.[33] Although both presentations were made as if he was making an individual presentation, these research projects can be considered as the inaugural long-term forecast that consists of the growth potential of the Korean economy and the direction for development suggested by the KDI. Also, these presentations are meaningful in the sense that these became the starting point of various long-term forecast research projects.

33. Kim (1973), KDI (1973).

The first large-scale long-term forecast with the institutional participation of the KDI was carried out in 1976 and 1977, entitled "Long-term Economic Society Development Research," and long-term forecasts have continued since then.[34] The "Vision 2011" published in 2001 and the "Vision 2030" written during the mid-2000s are the representative long-term forecasts conducted during the 2000s.[35] These tasks require not only recruiting a capable workforce equipped with in-depth knowledge in many different areas, but also combining all the research from many different fields to complete a big picture of consistency, which are all very important things to consider. The KDI produced not only publications on the economics field, but also was responsible for deriving an overall conclusion by combining various research institutes' research outcomes and the human resources.[36]

Meanwhile, the KDI has continuously conducted many research projects that look back on the long-term development process of the Korean economy since the 1970s. These basic tasks that may look quite different from the ordinary tasks of think tanks have extremely important significance in providing a basis for long-term forecasting. The most representative achievement was the 'Research on the Modernization Process of the Korean Economic Society' in 1977. This research was jointly conducted by the KDI and the Harvard Institute for International Development (HIID), the research covered Korea's economic development path after 1945. The research was published into a series of 12 books, and was published in two languages, Korean and English.[37] This research was groundbreaking in that it provided a future prospect of Korea's economic development to be documented based on historical data. Furthermore, it has provided a crucial basis for long-term forecasting of the Korean economy.

Afterwards, although there may have been a difference in scope, similar types of research were conducted in a continuous manner. The「Finance of Korea: 40 Years of History」(series of seven books) was published in 1990, and the book titled "Half a Century of the Korean

34. See Chung ed. (2002), pp.162~169 for the background of the research procedure and its process.

35. KDI (2001).

36. However, recently whenever the government regime changes, they are disposing of the existing forecasts and conducting a brand new forecast analysis. This is a method that does not exactly match the main purpose of long-term forecasting, which is to foresee 20~30 years ahead. This is because, although the name of the report may change, the contents do not really change. Having this under consideration, there have been criticisms from inside and outside of the institution that long-term forecasting tends to become an unpractical project that merely requires many human resources and a huge budget, but does not create new contents.

37. Chung (2002, pp.155~161). Among the series of 12 books, nine were translated into the Korean language, which are Repetto et al. (1983), Kim and Roemer (1984), Song and Mills. (1980), Kim et al. (1984), Krueger O. (1984), Moon et al. (1981), Sakong and Jones (1981), Cole and Park (1984), Mason et al. (1981), to name a few. Three were only published in the English language.

Economy: Historical Evaluation and Vision for the 21st Century" was published in 1995 to commemorate 50 years of independence, which looks back on the past 50 years of the Korean economy. Recently, to commemorate 60 years of the nation's foundation, the KDI published 「The Korean Economy: Six Decades of Growth and Development」, which summarizes the history of the development of the Korean economy.[38] For this publication of five books consisting of 3,000 or more pages, the former fellow and president of the KDI, Dr. Il Sagong, and Dr. Youngsun Koh, a Senior Fellow of the KDI at that time, spearheaded the project. The major contents were written and proofread directly by many KDI fellows.

Other than these large scale projects, the KDI also is responsible for conducting research on long-term changes of the Korean economy or the history of the rapid economic growth period.[39] The KDI is also in charge of collecting and organizing the core data related to Korea's economic growth, such as a publication of recordings of the Enlarged Meeting for Export Promotion and the Meeting for the Monthly Economic Review. In effect, the KDI is also endeavoring to conduct long-term economic development research, and to set the basis for the Knowledge Sharing Program (KSP), which shares Korea's development experience with developing countries.[40]

1.2.5. Public Finance

The most basic roles of the government's economic management are managing tax revenue and government spending. As aforementioned, the KDI published a series of reports on how to allocate a resource budget in the year following its foundation, to estimate the scope of the government's tax income and made related policy suggestions.[41] Also, Dr. Chuk Kyo Kim published a report titled the "Research on the Enhancement of the Budget System" in January 1975. This presented a rough sketch of Korea's budget system.[42]

Government finance has been considered extremely important since the KDI was founded, as it was the mission of the KDI, and its importance was even more obvious given its relationship with the Economic Planning Board. However, there are many different

38. Cha et al. (1995).

39. Most representative are Rhee (2000), Kang, Rhee, and Choi (2008), etc.

40. About the Knowledge Sharing Program (KSP) projects, see Section 3.4.

41. KDI (1972), Park and Kim (1972), Kim and Park (1972).

42. Kim (1975). Meanwhile, in the Meeting for the Monthly Economic Review held in May 1974, the Economic Planning Board reported the budget system reform to the president and the participants of the meeting. The contents of this presentation are basically identical to the contents of the written report. In other words, the written report by Dr. Chuk Kyo Kim was used as the basis for designing the frame of the public finance system of Korea, as well as the report made during the meeting. Park et al. (forthcoming).

areas even within the field of taxation alone, such as income tax, value-added tax, and the inheritance tax – the same can be applied to government spending. Therefore, only utilizing the human resources in the KDI was not enough to handle all the research demand by the Economic Planning Board, the Ministry of Finance, the National Tax Service (NTS), etc. Due to this reason, the government established a separate think tank named the Korea Institute of Public Finance (KIPF) in 1992, to have them be responsible for the functions related to taxation. Some KDI fellows who were in charge of taxation transferred to the KIPF and helped its development.

However, despite the redistribution of tasks, the KDI is still responsible for many public finance related tasks in collaboration with the KIPF. Through the 「National Budget and Policy Issues」, which was published from 1981 to 2008, the KDI provided the basis needed for budget planning that focused on major policy goals. Starting from the 2000s, they were in charge of the overall publication of the "National Fiscal Management Plan", which enables using the government budget in a more systematic way, thus contributing to the settlement of this system.[43] Moreover, the KDI is still continuing research on core issues in the area of taxation and finance. This is due to the fact that the task of figuring out fiscal problems in relation to many different sectors of the national economy has a greater separate meaning from detailed knowledge for individual issues related to public finance.

The task of the KDI related to public finance has expanded continuously after the establishment of the KIPF. Also, the number of researchers conducting research on related issues increased even after the foundation of the KIPF. Furthermore, in 2001, the PIMAC was established, which took care of the preliminary feasibility studies that enable large-scale public financed projects of more than 50 billion Won to operate without difficulty. The PIMAC has recently expanded its area to the anticipatory and posteriori assessments of other sectors of large-scale government spending. I will explain the PIMAC in detail in the next section.

1.2.6. The Economic Policy and the Open-door Policy

During the 1960s and the 1970s, government-led economic development policy greatly contributed to increasing national income. However, many side-effects ensued. Among those side-effects were the monopolistic and oligopolistic market structure that induced many socioeconomic problems. While the government pursued an export-oriented economic development, the government supported private firms through various measures, such as with monetary policy, subsidy packages, and regulatory policies on market entry, as

43. Koh, Hur, and Lee (2004) and the KDI, Mid-term National Fiscal Management Report.

well as protecting the domestic industry from competition with foreign goods. Through this procedure, the large conglomerate groups, and the monopolistic and oligopolistic market structure was introduced. This made consumers unwillingly accept to buy products at a higher price, and also allowed firms to be complacent about enhancing the quality of their products, thus hindering consumer welfare as a side-effect.

The Economic Planning Board tried to solve this problem with various measures such as controlling the price of main products. Nonetheless, as the economy grew, direct government intervention by regulating the activities of private firms, such as by controlling the commodity price, yielded more problems than benefits. Under these situations, the government legislated the "Act on Market Price Stability and Fair Trade" in 1976 to create a basis for transition of the legislative base, a policy direction from the previous competition policy, and a market friendly economic management.[44]

The KDI put much effort into the transition of policy to be successful. In 1975, Dr. Kyu Uck Lee analyzed the current state of the market concentration ratio by industry, and published in 1977 a policy report mentioning a large-scale empirical research on the monopolistic market structure and the direction for a fair trade policy.[45] Through these series of research, Dr. Kyu Uck Lee argued that Korea has an extremely monopolistic market structure, which greatly decreases the welfare of the consumers, thus a policy to solve this problem is needed. Nevertheless, during the 1970s when the government led the export-oriented rapid growth as its basic direction of economic policy, and when industry protection and price control were widely practiced by the government, it was very difficult for these suggestions to be fully accepted or change the policy direction.[46]

The transition to a market-friendly policy was achieved in the 1980s after the demise of the president, Chung-hee Park. The 5th Republic set market stabilization as its first priority for economic policy, and the open-door policy and competitive market order rather than a direct price control was utilized to reach their goal. The "Act on Regulation on Monopoly and Fair Trade" legislated in 1981 and the establishment of the Fair Trade Commission has acted as the milestones for development of economic policies.

44. See Committee for Compilation of The Korean Economy: Six Decades of Growth and Development (2010) Vol. 1, Chapter 6, pp.776~799 for information on a broader discussion on the development process of the fair trade system.

45. Lee (1975, 1977).

46. For example, even during the drastic economic crisis in 1978, the president of KDI, Report-Hee Park, seemed to have accepted the economic stabilization policy, yet, argued that the only path the Korean economy must choose to take is the export-oriented rapid growth. Enlarged Meeting for Export Promotion, April 27th, 1979. Rhee et al. (2013, p.586) May 24th, 1979.

Such changes in the policy trend brought a new transition point for the KDI.[47] Research on industrial structure and competition policy, which the KDI accumulated a vast amount of research for since the 1970s, were expanded to a great degree. Dr. Kyu Uck Lee, who led the research on competition policies, expanded the depth of the research through an accumulated series of research during the 1970s, and in 1982, he suggested a concrete policy analysis and suggestions on the market structure enhancement of 12 industries, such as animal feed, bottle caps, Cheongju (a type of alcohol), cosmetics, plate glass, machinery, textiles, electronics, etc. through the 'Research Series for Competition Promotion Policy Enhancement Methods'.[48]

The transition starting government-led economic development policies into market-friendly economic growth in favor of an open-door policy provided an extraordinary turning point for the KDI. That is because the KDI was the one and only institution at that time capable of providing policy consultation for the government with a thorough understanding of Korea's market economy. As a result, the consultations by the KDI greatly influenced the formation of policy direction in favor of the open-door policy and the market-friendly policy in the 1980s. Also, this direction has continuously been maintained by the Korean government.

One noteworthy fact to be emphasized is that, among these changes, none was for granted – that is, none of the serious changes happened inevitably. Even though the economy may grow, the government's policy direction is not obliged to change into a market-friendly direction. Also, unilaterally maintaining a policy direction is not an easy thing. The reason for the change in policy direction since the 1980s was the changing economic environment,

47. Regarding these policy changes, there had been a great influence by the leading persons of the 5th Republic's early economic policy. Especially Jae Ik Kim, the former Senior Secretary to the President for Economic Policy, is a very important person to proceed with this discussion. Senior Secretary Jae Ik Kim was a government official of the Economic Planning Board. He emphasized the importance of economic stability while working at the Economic Planning Board after he came back from his studies in the U.S. during the early 1970s. However, his arguments were not accepted by the government. Thus, he became disappointed and decided to move to the KDI. However, soon after it was decided for him to move to the KDI, he was asked to serve a major role in leading economic policy of the 5th Republic at the request of General Doo-hwan Chun, who seized power through a coup d'état at that time. This had greatly contributed to the introduction of the market-friendly economic policy. While Senior Secretary Jae Ik Kim was assassinated when he was 45 years old due to a bombing by North Korea at the Martyrs' Mausoleum to commemorate Aung San in Rangoon, Burma (currently Myanmar), looking through his life is very important not only in the aspect of his life as an individual, but also in the sense that there exists many implications regarding the situation of the KDI at that time, and the relationship between the Economic Planning Board and the KDI. See Lee (2008), Koh and Lee (2013), etc. for a detailed explanation on the life of Senior Secretary Kim Jae Ik, and his role related to the formation of economic policy during the 1970~80s.

48. Lee (1981a, b), Lee (1982a, b, c, d, e, f, g, h, i, j, k)

as well as the KDI's constant request to the government to change, through accumulative research on such policy directions. Furthermore, the KDI having realized their arguments through its credible publications and the involvement of KDI fellows in the government all contributed to helping maintain a steady policy direction in the long-run. These factors help build KDI's reputation as being instrumental in building Korea's economic growth, changing the government's policy direction, and KDI being endogenously affective.

The number of fellows who conducted research related to competition policy continuously increased, firmly establishing competition policy as a research field. Research on competition policy further developed as regulation reform related research after the 1990s, and in 2014, the Center for Regulatory Reforms was established in order to focus mainly on these related tasks.[49] Moreover, they expanded their scope of research to judicial policies focusing on the importance of defining and protecting property rights, which is the basis for the market.[50] In addition, research pursuing economic growth through an open-door policy greatly contributed to the market-opening in the 1990s, and the implementation of the FTA in the 2000s.[51]

1.2.7. Dealing with and Overcoming the Crisis

The first report published after the official establishment of the KDI was the "Comments on Company Layoff," published on June 1, 1971. The fact that the report on company layoffs was the inaugural report of the KDI was quite irrelevant to the establishment of the economic development plan, which was the original purpose of its foundation. This is very symbolic in terms of the future path the KDI has walked ever since.

As the Korean economy in the 1970s was targeting high economic growth, it had many related structural instability. Under this condition, it can be said that it was an obvious mission for the think tanks to acknowledge these economic problems and to suggest solutions. After the report of company layoffs, the next year in June 1972, President Mahn Je Kim published a 15-page report titled the "Resolution for Decision of a New Policy." This report argued that the direction of the national economic policy be curved from economic growth to market price stability. To achieve these goals, he suggested the following: 1. inflation rate of 3% per annum, 2. GDP growth rate of 8.5%, and 3. income growth rate of 10% per annum, and also listed necessary policies needed to achieve these targets.

49. Kim, Kang, and Kim (2004), Tcha ed. (2005), Koh et al.(2009), etc.
50. Lee et al, (1991), Lee et al, (1995), Kim (2007, 2008, 2010), Kim and Chun (2012), Kim (2011), etc.
51. Tcha ed. (2007).

These arguments were, according to today's standards, nearly impossible to achieve. However, considering the economic situation of that time, which saw more than a 10% economic growth rate every year, 8.5% would have been considered a very low target.[52] Nonetheless, maintaining the high economic growth rate of 8.5% and lowering the inflation rate to 3% at the same time is in fact almost impossible. Despite these limitations, suggesting that the economic growth rate be less than 10% in order to suppress the inflation was, at that time, a sensational argument, which by no means the government would accept.[53]

The early reports were mostly published as 'restricted documents'. Therefore, these reports emphasizing economic stability were not directly released to the public like any other reports of that time. However, within the government offices, many high-ranking government officials, as well as the president, were able to have access to this document.[54] As such, the KDI publishing reports that opposed government policies is said to be an important part of the work the KDI has performed over the past 40 years. This has formed some sort of tension between the government and the KDI. Discussion related to this issue will be further mentioned in Section 4.

While policy suggestions were made in order to prevent a crisis, in fact when actual crisis situations occurred, the fellows of KDI dealt with having to identify ways to overcome the crisis. It was the same for the economic crisis in 1997, which can be considered the biggest economic crisis in Korea's history, and the recent 2008 global financial crisis. In order to overcome the crises, the KDI conducted research and consultations for various related issues, such as the direction of economic policy, layoffs of insolvent companies, economic structural reform, etc. This greatly impacted policy establishment.[55] Also, even after overcoming the crisis, the KDI conducted in-depth research on the process of overcoming

52. The tendency of publishing the reports as restricted documents gradually changed since around 1973. The report published by Dr. Pal Yong Moon in 1973 was not classified as a restricted document.

53. According to Kyung-sik Kang who became the Market Price Policy Director at that time, the Economic Planning Board was facing a dilemma due to the report written by President Mahn Je Kim, which stated the inflation rate be set to 3%. Thus, they used various methods including the price control, to set the inflation rate at 3% and reported to the president the following year in August. He states that this dilemma occurred due to the "unrealistic" research report by President Mahn Je Kim. Nevertheless, he does not mention the fact that the core of this report was to implement policies stabilizing the aggregate demand rather than controlling the market price itself in order for the government to achieve market price stability. Kang (1992), pp.40~43.

54. Refer to Footnote 53.

55. Kang (2004), Shin (1998), Shin and Hahm (1998), Shin (1999), Koo (1999), Koo, and Sul (1999), Kim et al.(2000), Yoo (2000), Hahm (1999), Kim et al. (1998).

the crisis, as well as the change of economic structural change to prevent such crises in the future and to settle the basis for economic growth.[56]

1.2.8. Other Sectors

Till now, we have explained a few important areas of KDI's research since its foundation. Indeed, the abovementioned areas of research do not include every single research area the KDI is involved in. It is no exaggeration to say that the KDI has conducted research on all areas of the Korean economy, such as trade, industry, finance, insurance, income distribution, pensions, labor, welfare, judicial policy, and North Korea issues.

Conducting research on such a variety of areas is necessary for enriching macroeconomic and comprehensive research that effect the nation's economy, such as macroeconomic trends and prospects, establishing economic development plans, and establishing long-term economic development strategies. Also, the KDI had to respond to the demands of government offices-while our society is becoming more and more complex, various government departments requested policy consultations on macroeconomic matters. Expansion of these research areas increased the demand for human resources, and the increased workforce naturally led to the extension of new research areas. Continued expansion of the study areas ultimately served as a basis for establishing the characteristics of the KDI as a comprehensive research institute.

However, to become a true comprehensive research institute, the expansion of the study area along with synthesizing this information into a unified flow is necessary. Expansion of the research area, and the increase of the research workforce always intensified the fundamental problem of how to share the research conducted within the KDI among its members, and thus how to achieve a diverse array of research while maintaining harmony within the institution.

To address these issues, research departments were formed by major fields of study, and measures to carry out systematic interaction among fellows is being developed. As for large-scale research assignments, in many cases, the topics may be of a wide variety of areas from economic growth to social welfare. Therefore, by having many fellows from various fields jointly participate and naturally share their ideas on each other's research outcomes, deriving a unified conclusion becomes possible. Also, ordinary events such as seminars, meals and leisure activities are strongly encouraged so that they can share their interests

56. Kang, Kim, and Choi (2004), Shin and Hahn eds. (2006), Koh and Shin eds. (2007), Hahn and Shin eds. (2007), Cho et al. (2011).

and better understand each other. As a result, within the KDI, people are able to easily gain in-depth knowledge even in areas outside of their expertise. For example, it is common for a fellow with expertise in economic policies to have a certain degree of knowledge on issues such as the recent news of North Korea or pension reforms. This culture of knowledge sharing serves as the basis for achieving unity in their research.[57]

As mentioned above, the flow of internal information and active interaction is the main source of competence of the KDI. Furthermore, this can be attributed as the most important aspect that President Mahn Je Kim pursued upon the KDI's foundation, and which still lived on today. And this is the main reason why KDI can still exist as a comprehensive research institute despite the existence of many other individual research institutes, as well as the development of many other methods for sharing information.

1.2.9. Pursuing Empirical Evidence

Before ending the discussion on basic research, one important thing to mentioned is the important fundamental that has been the root of the KDI's research for the past 40 years. That is, providing an assertion based on the presentation of empirical evidence or empirical basis for the argument.

There can be various opinions on a certain policy. Especially in many cases interest groups may collide in a severe manner. Therefore, discussions merely based on logic may end up being an fruitless debate. If all arguments are logically feasible, debates cannot be a solution for the problem anymore. Thus, deciding which argument is more feasible is dependent on whether it flows with reality. As such, judgment based on facts can reduce unproductive debates. Also, empirical evidence is very important even for the policy to reach the outcome actually expected.

57. The Fellows Lounge is an important place for the fellows to interact with each other. The fellows gather around at the Fellows Lounge after going to work in the morning or after lunch to freely exchange their thoughts on their interests or their current research. However, at the end of the 2000s, the KDI building in Hongreung faced serious problems due to a lack of space. Thus, this lounge was transformed into an office space. Many fellows actively objected to this plan, because they were worried that interaction among fellows will be dramatically hindered due to the elimination of the lounge. Eventually, this problem was naturally solved when KDI moved to Sejong City and its new building.

Empirical evidence on economic phenomenon can be suggested in forms of statistics in most cases. Since the foundation of the KDI, they put much effort in constructing the logic based on empirical evidence. This was not an easy task during the early times of its foundation. In the early 1970s, in Korea, data for statistical analyses was not easy to get, and there were not even enough computers to use for statistical analysis. Therefore deriving basic statistics from massive data was a very difficult thing to do, not to mention regression analyses. However, under these conditions, the effort to conduct research through statistical analysis continued.[58] Furthermore, the government also provided many statistical data that were not open to the public for many analyses by the KDI. As a result, during the 1970s and the 1980s, most reports published by the KDI were of high quality in the aspect of policy research, as well as from an academic perspective.

After the 1990s, statistical analyses became very common due to the development of computers. Also, the scope of data open to the public extended to a wider degree, thus the information monopoly by the KDI was alleviated. However, the KDI still provided high quality in-depth research outcomes to maintain its reputation qualitatively and quantitatively. As mentioned, the outstanding professionalism of the KDI stems from having a firm logic backed by empirical evidence. The spirit of pursuing empirical evidence has been the basis of the KDI's research for the past 40 years, and is indeed a tradition that must continue.

1.3. Frequent Assignments or Short-term Tasks

The KDI fellows publishing research papers through 6-months to 1 year of research by selecting a topic related to the national economy after going through a thorough consideration is rather a method of providing policy consultations mainly in favor of the researchers or the suppliers. On the other hand, responding to the request of government offices, such as the Blue House, or the Ministry of Strategy and Finance, is providing policy consultations mainly in favor of the consumers. While policy consultations are requested as long-term research at times, in most cases, they are requested with a 2~3 week lead time, or even for a day or two. Within the KDI, such consultation requests of short notice are categorized commonly as "Short-term Assignments," or as "Frequent Assignments" due to being frequently asked without a prior plan. For these assignments, 10~20 page reports in a summary form are typically submitted.

58. Regarding the difficulty for statistical analysis at that time, see Chung (20023), pp.77~83.

From the fellows perspective, between the long-term research and the short-term consultations, there is a conflict concerning resource allocation. For example, government agencies tend to request short-term consultations because they have to take care of their many urgent tasks. However, if too much time is used up for such requests, it may cause a hindrance to the long-term studies. This is primarily due to the reduction of absolute time required for basic research. Furthermore, irregular short-term consultations tend to break the flow of the long-term study even though the short-term consultations do not require much time to complete. Thus, if you fail to thoroughly perform such basic research, accumulation of knowledge to enable in-depth consultation will be impossible, thus eventually the fellows will not be able to give any consultation at all. Also, when the task is focused mainly on the short-term consultations, the fellows may feel dissatisfied and consider quitting their jobs.

Of course, when short-term consultation requests are neglected due to resources being dedicated to the basic research, they may fail to fulfill the major role of the think tanks to provide consultation to government activities. Therefore, appropriately managing the short-term assignments has become one of the most important roles of the president of the KDI, as well as the senior management. While they manage to eliminate dissatisfaction from the government about the existence of the think tanks, short-term assignments must be limited so that the fellows can also accumulate adequate amount of other research.

Especially during the late 1990s when the system with the NRCS was introduced, short-term tasks induced many complicated problems related to the income structure of KDI and the compensation issues for the researchers. In the late 1990s, the government has promoted a variety of policy reforms to improve the performance of think tanks – one of which was to carry out research in the form of request for services received from government departments. These systems may not cause much problems associated with long-term studies, however, for the short-term assignments, it was not easy to come up with an assessment compensation system. Even within the KDI knowing what kind of compensation system to maintain is a problem these days since the size of the organization has grown bigger.

1.4. Summary and Evaluation

Since the foundation of the KDI in 1971, the research conducted by the KDI can be summarized as comprehensive analysis on the national economy and suggestion for policy solutions. They also conduct macroeconomic research from many aspects such as short-, medium-, and long-term, to achieve sustainable economic growth for the national economy as a whole. This not only includes the general macroeconomic analysis in economics, or the economic trend analysis and forecasting, but also the input-output analysis which involves the detailed industrial interactions, and also the research related to the history of economics, considering long-term economic fluctuations.

The in-depth study was conducted on various fields on the foundation of performing a comprehensive and long-term analysis for an entire country's economy, which was in fact how it has been since its inception. When looking at the list of the first four years of publications from 1971 to 1975, there are researches on topics of almost every field of economics, in addition to the ones mentioned above, such as finance, agriculture, taxation and public finance, population, labor, social security, transportation, education, income distribution, protection of the poor, trade, major industrial sectors, etc. This trend has continued to deepen and expand.

The study for many different fields was conducted to obtain a comprehensive point of view for the research. For the growth of the Korean economy, primarily a study of how to efficiently utilize the resources of the Korean economy has to be unprecedented. Nevertheless, we should pursue whether to expand the growth potential, or how to increase the resources we already have. Expansion of the growth potential can be achieved by pursuing change of the general variables considered to be endowed in short-term economic analyses, such as the increase of human capital, deregulation, technological development and innovation, settlement of the market order, etc. Therefore, how to make changes to the given variables can be the fundamental reason for the KDI to have extended their scope of research.

One important point is that, in many cases, the arguments expressed by the KDI through many publications over the past 40 years did not match well with the opinions of major offices of the government. The fellows of the KDI listen to a great deal of feedback from major government offices regarding the research initiatives, process of analysis, final inspection, etc. They strived to suggest results that can be utilized in real tasks of government offices as much as possible. Nonetheless, this does not mean that they are supporting the government posteriorly. As President Mahn Je Kim sought for a fundamental change of government policies, a considerable amount of research papers contain contents that appear to be going against or criticizing the current government policies, along with suggestions to improve the policy. This is a very important factor to consider when thinking about the existence of the KDI. This will be discussed in more detail in Section 4 where the relationship between the government and the KDI will be explained.

These days, each field a KDI fellow is in charge of, can be as immense as a topic that an entire separate think tank focuses their research on. However, how these topics harmonize within the overall national economy is an uneasy question to answer for each individual research institute. Therefore, the existence of the KDI plays a critical role in this regard.

Indeed, comprehensive research outcomes will not be produced merely by handling many different research topics. It is impossible to achieve that research outcome when the institute allows individual research according to expertise, as well as when there is no interest in one another's research. Regarding this matter, we will take a closer look in the next section.

2. Human Resource and the Organizational Structure

President Mahn Je Kim became the inaugural president of the KDI in 1971 when he was 37-years old, and has led the KDI until 1982, for 12 years. When he first took the position to lead the KDI, the ideal model in his mind was the Brookings Institute of the U.S.[59] This meant that he was willing to have this institute grow into a think tank of great influence, such as the Brookings Institute, onto the government or the public opinion. Also, at the same time, it meant that he would benchmark the Brookings Institute in order to learn what kind of organizational structure and size should be the best to become a good think tank.

In that sense, President Mahn Je Kim thought the optimal size was to only have 20 to 25 fellows, or to have a relatively small organization size like the Brookings Institute. He also thought, that size was adequate for him to lead the group as well as to interact with each and every fellow in the institute. And he also thought the quality of the research will be manageable and guarantee the overall direction and the unity of the research. If the institute size gets larger, it will become impossible for the president to manage all of the research conducted by each fellow. It will be inevitable to appoint middle-level officials, thus bringing in a hierarchy to lead their research, and as a result, the quality, unity, and consistency of the research will suffer.

However, this design by President Mahn Je Kim was even uneasy to maintain under his rule. The biggest reason was the numerous policy demands from the outside. The KDI, since its establishment, has had its services requested, from not only the Economic Planning Board, but also from many other government offices related to various policy task related consultations. This is still an ongoing situation. Since the demand for research and

59. Chung ed. (2002), p.51.

consultation always exceeded the supply capacity, there always were constant demands from within and outside of the KDI that more fellows were needed and the organizational size was to be expanded.[60] As a result, the number of fellows of the KDI expanded to more than 60 as of 2013.

During this expansion of fellows, the most important problem was how to recruit qualified human resources and how to manage them so that they could conduct stellar research. The achievements of the KDI for the past 40 years proves that they were successful in securing skilled human resource as well as adequately utilizing them despite the increase in their organizational size. In this chapter, after outlining the structure of the human resources, as well as the organization itself, we will explain the selection, evaluation, interaction, retirement, and activities after their retirement, etc. of the fellows to find out what the key to successfully managing human resources is.

2.1. Size of the Human Resources and Its Structure

As of November 2014, there are 482 people working at KDI (<Table 3-1>).[61] When looking at the structure of the main office, these human resources can be basically categorized as Fellow-Specialist-Research Associate-Administrator. To conduct a variety of research by utilizing these human resources, 160 billion Won per year has been spent according to the 2013 budget. (See <Table 3-2>). As indicated in [Figure 3-3], the budget of the year 2013 is quite different from other years, and that is because the overall budget includes the cost for transferring to Sejong City. When excluding the related cost, it can be said that around 100 billion Won of budget has been used. And the amount of this budget is the result from a gradual increase in budget due to the increase of human resources over the past ten years.

60. They even discussed comprehensively in 1973. Chung ed. (2002).

61. KDI webpage. This number includes all affiliated institutes' employees except the ones in the KDI School, or the Graduate School of Public Policy and Management.

Table 3-1 | Structure of the Human Resources of the KDI (Excluding the KDI School of Public Policy and Management)

(as of the end of 2013)

	Main Office	Affiliated Institutes	Total
President	1	0	1
Fellow	52	17	69
Specialist	7	41	48
Research Associate	67	155	222
Administrator	121	21	142
Total	248	234	482

Note: The above statistics includes staff on leave and dispatched people. Meanwhile, among the fellows, there are people that hold both positions in the main office and the affiliated institutes. For these cases, they have been counted to belong to the affiliated institute.

Source: KDI webpage (as of November 20th, 2014).

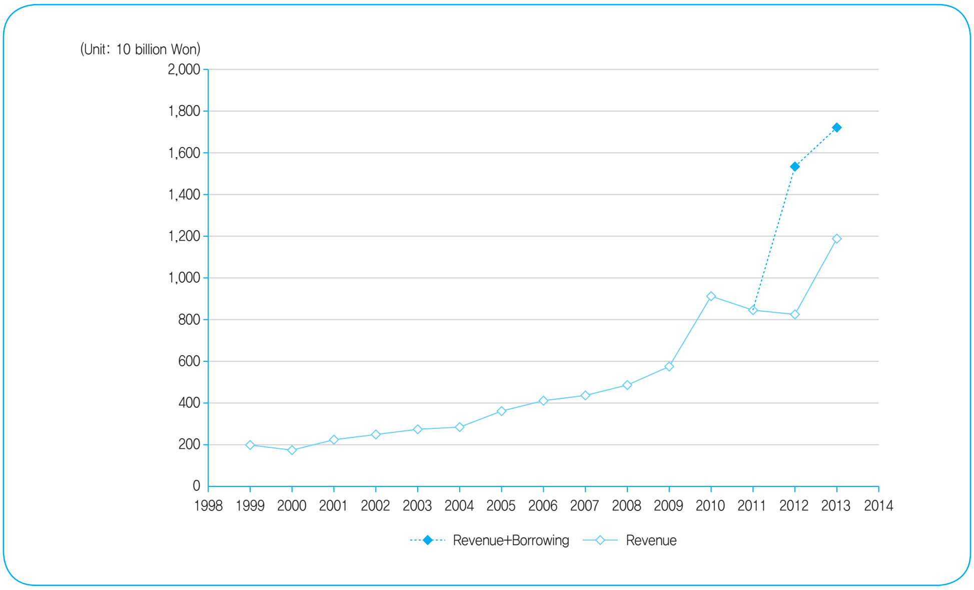
Table 3-2 | The Income and Expenditure of the KDI: 2013

(Settlement basis, Unit: million Won)

Income		Expenditure	
Category	Amount	Category	Amount
Total Amount	166,220.7	Total Amount	163,716.1
Government Fund	79,422.0	Labor Cost	19,722.6
Own Income	16,475.6	Project Cost	35,678.2
Balance Carried Forward from the Last Account	13,548.6	Running Expense	1,809.0
Government Fund	11,740.3	Facility Cost	42,567.1
Own Income	1,808.3	Other	63,939.2
Borrowing	56,774.5		

Source: Audit Report.

Figure 3-2 | Budget of the KDI (Income settlement basis, Excluding the KDI School of Public Policy and Management)



Source: KDI Webpage.

When looking at individual responsibilities, the fellow is responsible for conducting research. They are Ph.D. holders who conduct research on their own or in collaboration with other fellows, and at the same time serve as executive employees responsible for decision-making tasks concerning the organization's operations. The specialist is responsible for professional tasks associated with a particular data or a particular field, such as the management of statistics related to economic trends and prospects. Research associates support the work of fellows, and are typically at least master's degree holders. The general administrative staff is responsible for various administrative services related to accounting, recruitment of human resources, and operational affairs of the Institute. Various subsidiary bodies may follow the organizational structure of the main office, however, they may operate according to their assigned specific task.

Those related to conducting research, such as the fellow, specialist, and research associates are managed in a multiple series structure. Each unit is composed of a different series, thus the hiring process may vary, and as a rule, there is no transfer from one series to another. In other words, a specialist will not be promoted as a fellow even though he or she may be very talented and have a great deal of experience. The same holds true for the research associates. Indeed, among the KDI's fellows, there are many who were once research associates. However, they did not become fellows by promotion. They typically have to leave the KDI and re-enter the institute through a different hiring process.[62]

Compared to many other think tanks and private research institutes that have single series structures, the KDI can be thought to have a very unique human resource structure. For example, the Korea Institute for Industrial Economics and Trade (KIET), which is a think tank in the economics field established in the mid-1970s, has a single series structure. Therefore, a Ph.D. holder may enter the institute as a fellow, yet, a researcher or the person who supports the research of others may earn a degree and gain enough work experience to be promoted as a fellow and conduct his or her own research.

The multiple series structure and the single series structure both have advantages and disadvantages. Therefore, it cannot be said that one is absolutely superior to another. Even though the KDI first chose to follow the multiple series structure, it may have been possible for them to transfer into a single series structure.[63] However, due to the characteristics of the KDI's tasks and the environment surrounding the KDI, the multiple series structure has been reinforced. The reasons for this can be inferred as follows.

The first is the nature of the work. The kind of research institute it is typically dictates its organizational structure. The government-sponsored research institutes of Korea were, except for the KDI, established for the purpose of conducting research on specific areas, and thus the researchers conducted research responsible for several sub-areas within the field of their expertise. For example, the Korea Institute for Industrial Economics and Trade (KIET) mainly focuses on government policies related to Korean industries. The researchers take on one field among chemicals, steel, automobiles, and services as their expertise, specializing in one specific industry sector. Given this research environment, they must accumulate a lot of knowledge about a particular industry, and it may be necessary to carry out research by focusing on one industry for a long time. In this case, the way to promote a researcher to become a fellow can be to elevate the workforce to conduct an adequate level of research required by the institute.

62. More specifically, after the researchers leave the KDI, they earn their Ph.D. degree from a university in Korea or from abroad, spending five to six years obtaining their degree, and then apply for a KDI Research Fellow position.

63. The suggestion that the researchers should be able to be transferred to become fellows when the researcher earns a certain level of work experience and an academic degree, has emerged even within the KDI. In fact, that was one of the core issues of the labor-management dispute in the late 1980s that occurred at the KDI. See MK Business News 1988.7.14., the Hankyoreh 1988.12.14., The Kyunghyang Shinmun 1988.12.14., etc. regarding the labor union activities and the conflict, etc.

In contrast, KDI fellows are asked to have the ability, or an integrated knowledge, as much as the in-depth professional knowledge, to consider various fields all at once. In other words, while they conduct research on 'what kind of support will be effective to foster the steel industry?', they must be able to answer questions at a similar level quality about 'Would supporting the chemicals industry with the resources to support the steel industry be more beneficial for long-term development of the country?' or 'Is using tax for such support justifiable?' This requires the ability to look at several areas at the same time from the perspective of the entire national economy although the original research topic may be limited to one's own majoring field. This is related to the reasoning ability to analyze and combine many kinds of information in addition to having knowledge on a specific field. Therefore, it can be more reasonable to select the right person with the basic qualifications for the fellow position rather than promoting someone.

Second, while handling a task, this kind of human resource management might have been consolidated endogenously. For government officials in government offices, the source of their ability in most cases tend to come from the professionalism they have accumulated from their experiences and knowledge of the field on the selection, discipline, and performance of tasks. Having this as given, when the KDI fellows are capable of analytically approaching a problem while considering the overall frame of the national economy, they can be complimentary to government officials for policy formulation.

Third, a fellow of the KDI, compared to other research institutes, are more likely to have to conduct researches far from their own major. If an existing staff did not 'major in' conducting research for a given problem, they often had to find fellows within the institute who studied a relatively similar field, or the ones who are interested in that topic. In particular, this problem occurs more frequently in the KDI than other research institutions-and this is due to the nature of the Ministry of Strategy and Finance, where most of KDI's tasks come from. Namely, the Ministry of Strategy and Finance is in charge of the government budget. In fact it manages the tasks of all sectors of the government in Korea. Therefore, the Ministry could virtually be asking the KDI to cover all areas in which the government is involved.

Fourth, the leading characteristic of the KDI should be noted. Right after its establishment, the KDI was to the first to conduct research in most cases, no matter what field of study the KDI touched upon. This still tends to be true these days. This indicates that, for the research area selection, freedom given to the research as an individual as well as in with regards to the institute is quite high, and that the research conducted by the KDI tends to be more along the lines of agenda setting than serving as a problem solving procedure. Accordingly, for these cases, the basic qualifications to conquer a new field are keen sense of curiosity and enthusiasm rather than a high level of accumulated knowledge. Given these characteristics of KDI, a multiple series structure for the organization may have been more appropriate.

2.2. Fellow

2.2.1. Size and Flow

As described in Section 1, one of the most important reasons for the foundation of the KDI is to ensure the expertise necessary to establish economic development plans. To establish the economic development plans properly, economists capable of analyzing statistics on economics were needed. However, there were not many economists at the time employed in domestic universities nor was there a sufficient workforce with a Master's degree or Ph.D. And the existing staff, including university professors, was unable to provide special help related to designing the economic development plans. This was because that they were mostly from the German historical school of economics, thus there were not capable of conducting research based on the positive research founded on statistics needed for establishing the economic development plans.[64] Due to these reasons, early economic development plans relied on human resources from abroad, thus, efforts to overcome this obstacle was the important drive for the foundation of the KDI.[65]

Therefore, while preparing for the establishment of the KDI, what President Mahn Je Kim focused on the most was securing economists from abroad who can conduct systematic statistical analysis, especially those who received their doctorate degree in the U.S. To achieve this goal, he went directly to the U.S., and contacted professors or researchers, or people who were soon to receive their Ph.D. degree in order to encourage them to come back to Korea. Thanks to such efforts, President Mahn Je Kim successfully recruited 12 Ph.D. degree holders in economics who joined the KDI during 1971 and 1972.

The workforce of the KDI has since been greatly expanded. As aforementioned, President Mahn Je Kim initially set the size of overall researchers with Ph. D's at around 25 persons, and he seems to have been targeting that number during his recruitment.[66] Nevertheless, this plan soon collapsed. [Figure3-3] shows the number of fellows who worked for the KDI for

64. For example, when looking at one of the oldest economic journals, the 「Economics Research」, there are only a few researches that can be categorized as a positive research based on statistical analysis among the journals published during the 1950s.

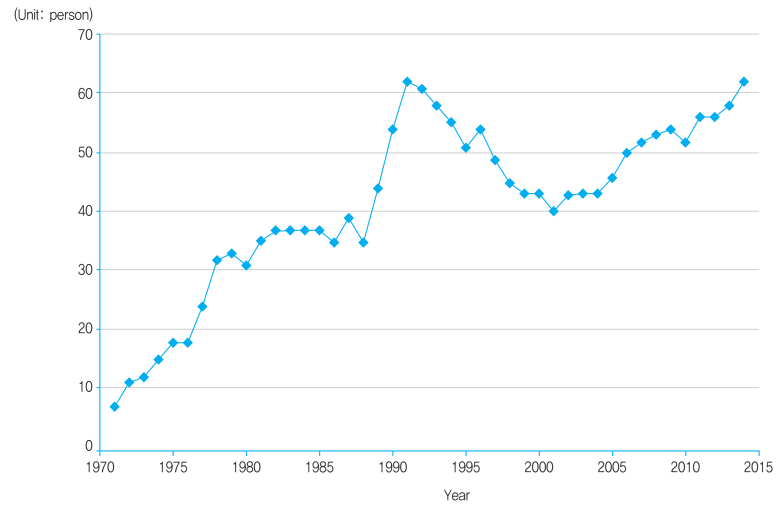
65. Chung ed. (2002), pp.16~38.

66. Chung ed. (2002), p.51.

the past 40 years. While there were 12 persons in 1972, the number already exceeded 25 in 1977. Also, in the 1980s, there were almost 40 persons. The number continued to increase, and as of 2014 there are 62 persons in total.

Such an increase is of course the result of additional recruitments. However, it is also important to consider the fact when understanding the characteristics of the KDI that this increase of human resources was achieved even though there were numerous people leaving the institute as well. Since 1971 until now, the number of fellows who joined the KDI was 234 people in total. This means that about 3.9 persons out of 5.3 recruited persons, which accounts for 74% of the overall recruited fellows, left the KDI every year (<Table 3-3>).

Figure 3-3 | The Number of Researchers of the KDI



Source: KDI Internal Data.

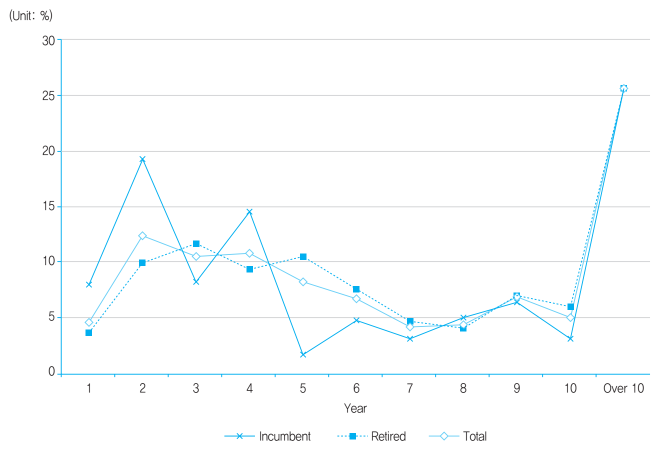
Table 3-3 | Continuous Service Years of the KDI Fellows

	Number of People	Average (Year)	Median (Year)
Employee	62	7.4	4.2
Retiree	171	7.6	5.5
Total	233	7.6	5.3

Source: KDI Internal Data.

This high turnover rate is a burden for the efficient operation of an organization. Above all, the procedures to find human resources abroad, to recruit them through interviews or seminars and figuring out their capabilities all entail much time and cost.[67] Fellows recruited this way cannot create the expected outcome upon entering the institute. For these recruited people, or fresh graduates with their Ph.D. degrees from the U.S., to be able to analyze the Korean economy,-and furthermore to conduct their own research needed for policy formulation – they need at least 4~5 years of training and experience. However, as shown in [Figure 3-4], around half of the total recruited number of people are changing their jobs while they are actually under the process of growing such capacity, therefore it becomes a problem.[68]

Figure 3-4 | Number of Years a Fellow Works for the KDI



Note: While the total number of KDI fellows that joined the KDI is 233, among them, 62 are currently still working at the KDI while 171 retired.

Source: KDI Internal Data.

For companies with a highly skilled workforce, such as accounting firms or law firms, it is quite natural for the turnover rate to be high. Therefore, this sort of high turnover rate for the KDI is in fact not an unusual phenomenon. Nevertheless, the high turnover rate has been one of the difficulties faced by the KDI to this day since its establishment. Another reason for this high turnover rate is the fact that the KDI is unable to secure a sufficient amount of

67. Regarding the recruitment process, I will explain in detail at "3) New Human Resource Recruitment."

68. Early job transition issue has been pointed out already around 1980. MK Business News 1981.3.12.

funds to pay the level of salary that satisfies the recruited fellows, due to their organizational nature of being financially dependent on government funds.

The workplace chosen by retirees the most after retirement is the university. However, there are many cases where the retirees get a new job elsewhere. The most representative positions they get are, the head of a different economics research center, government official, or a member of the National Assembly, to name a few. Whether a retiree goes to a university or elsewhere is closely related to the period of changing the jobs, how old the retiree is, and the period of employment. The longer they used to work for the KDI, the more they tend to move to a non-educational organization.[69]

One thing to mention is the rather unique aspect of turnovers from the KDI. How the institution or its members treat the retiree after they leave can be roughly grouped into two forms: severance or continuous bond. The case for the KDI is the latter. Many retirees from the KDI continue their bond with the institute in many forms. This bond is beyond the scope of personal networking, and continues to collaborate on research with the KDI through external services. The ones who successfully found a job in the National Assembly or any other government offices based on the experience earned from the KDI earn many consultations from the KDI and also support the operations of the KDI's tasks. In this aspect, retiring is not merely a loss of human resources, however, but works also as an expansion of the KDI's external link.

2.2.2. Fellow: Personal Background

The KDI, since its foundation, hired mainly Ph.D. holders of economics from the US. Even during the early stage after its foundation, those people were not the only qualified people to be recruited, since some of the workforce were chosen from other non-US regions.[70] After the scope of research was expanded, several fellows who specialized in fields other than economics joined, and also joined through mergers with other institutes such as the National Economics Regulations Institute. However, despite such few exceptions, most of the recruited researchers at the KDI were the economists who earned their Ph.D. from the US.

69. One of the reasons why many transfer to universities is also related to the free-riding aspect of universities. It is not easy for many universities to recruit fresh Ph.D. graduates from the US. By contacting them in advance, however, they feel more at ease when contacting doctors in the research institutes. Also, a person hired by the KDI already implies that they are qualified to be of a certain level. Therefore, the universities tend to recruit those people as professors.

70. Dr. Chuk Kyo Kim, who joined the KDI in 1971, earned his Ph.D. of Economics from Ruhr University Bochum in Germany. Also, Dr. Kwang Suk Kim who joined the following year is a Ph.D. of Economics from Korea University.

This can also be found in <Table 3-4>. This table shows the distribution of the countries where the researchers earned their degree, and each researcher's field of expertise among the ones who used to work or are still working at the KDI from 1971 to 2014. There was 199 people who earned their Ph.D. from the US, which accounts for 85% of the overall fellows of KDI. Also, when including the ones who earned their economics degree outside of the US, 94% majored in economics. There were 14 people who earned their degree from a non-US country, which are Korea, UK, Germany, France, and Japan. There were 14 non-economics majors, of which their degrees were statistics, business administration, sociology, political science, urban planning studies, journalism, etc.

Despite the various tasks the KDI handles, it can be easily observed that the majority are economists. This is becoming an issue concerning its adequacy. In reality, this aspect of the KDI is frequently criticized by the press or the National Assembly.[71] The KDI also tried to face these criticisms and consciously endeavored to recruit non-economics majors who earned their degree from a non-US country, however, there has not been a dramatic change in the KDI's human resources yet.

Table 3-4 | Majors and Country of Degree Pursuance of KDI Fellows

(Unit: person, as of October 2014)

	Country of Degree Pursuance		
	United States	Other	Total
Economics	199	12	220
Non-Economics	21	2	14
Total	220	14	234

Note: Visiting Fellow and presidents are not counted. As for non-economics, Business Administration (5 from the US) is included.

Source: KDI Internal Data.

The reason why this institute remains a group of 'Economists who earned their Ph.D. from the US' until today can be explained by three factors. First, since KDI's requested tasks are basically related to public finance and government spending, regardless of the topic, researchers without an economics background may not be able to handle the tasks. Second, due to the characteristics of economics, the room for handling many different topics does not exist. Lastly, the KDI does not have to recruit all sorts of experts from all fields. There have been may think tanks established for the past 40 years, and these

71. For example, the Kyunghyang Shinmun, 2007.6.11., 2010.8.17.

research institutes already have researchers who have majored in many different fields of study among the non-economics field. Thus, collaboration with those other institutes can be a solution. Rather, having a large set of economists, or of similar majors, can be an advantage for the KDI.

2.2.3. Recruitment of New Human Resource

President Mahn Je Kim, the first president of the KDI, visited many cities in the US in 1970, one year prior to the foundation of the KDI, to meet Korean Ph.D. degree candidates who were about to graduate, or Korean economists already employed at a university or a research institute. During this visit, he explained that a new think tank would be established in Korea and persuaded them to return to Korea, join the institute, and work with him.[72] During that time, Korea had relatively a much lower level of income, and politics were of an authoritarian political system. Therefore, it was very difficult to persuade qualified intelligent people to join the institute. To overcome such difficulties, he directly went over to the US and talked with them in person, which resulted in recruiting many intelligent persons to successfully open the KDI in 1971. As this story shows, the KDI put in a lot of effort to secure an intelligent workforce since its foundation, and the same efforts – although in different forms – has continued ever since.

There are some cases of fellows who joined the institute after working at a domestic university or a different research institute. However, in most cases, fellows tend to join the KDI upon their return to Korea from earning their Ph.D. After the year 2000, the procedure to recruit fresh Ph.D. graduates from the US is almost the same as famous US universities when recruiting their faculty.

The KDI posts recruitments around October every year targeting Ph.D. degree candidates who are set to earn their degree by the summer of the following year. While the potential applicants who are interested in the KDI sends their application forms to the KDI, a document review takes place to select candidates to interview in early January at the American Economic Association (AEA). The president of the KDI and 4~5 director-level fellows (or even as many as 7~8 persons) attends AEA to interview around 30 applicants for 40~50 minutes per person. The interview results are applied to the candidate's application and a short-list of 10~15 persons are invited to Seoul to present a seminar during February or March, and the final successful applicants are chosen based on the contents of their presentations from the seminar.

72. Chung ed. (2002).

The invitation to present at the seminar includes airfare and accommodations borne by the KDI. These seminars are held for around two hours, while the applicants make presentations on their theses and conduct a Q&A session afterwards. In most cases, many of the KDI fellows are present at the seminars in order to discuss the topics in-depth. After the seminar, all the participants attend a dinner to talk about many different topics other than the thesis, and answer the applicant's questions on what kind of organization the KDI is. After these seminars, the final successful applicants receive notification that they have been chosen, and once the successful applicants accept the offer, they finally become new fellows. These people return to Korea between June and September after earning their Ph.D. and start working for the KDI. The recruitment process for persons with job experience, or the scholars who already have a job inside or outside of Korea, is similar to that of candidates fresh out of their graduate school.

Whether more weight should be placed on a candidate's potential or field of study when recruiting new fellows has always been an issue for the KDI. If an applicant has an outstanding ability for research as well as having majored in the field the KDI is in need of right now, then it would be perfect. However, this is not usually the case. There is often times a mismatch where a candidate shows exceptional potential but has a different field of study from the one the KDI is seeking, or identifying a candidate with the right field of study but who did not perform well during the job seminar.

There is no specific answer to this dilemma. However, it seems that the KDI focused more on the candidate's potential than the majoring field during the recruitment process. This is also related to the characteristics of the KDI's research that was mentioned earlier. That is to say, for many of the research projects that the KDI should conduct, it is very difficult to find the right person with that specific major, or it is in fact almost impossible. Under this condition, if a person seems to have the potential, then that person might successfully conduct the research of the necessary field – which was the reason why the KDI recruited more people with potential rather than those with the right majors.

2.2.4. Promotion System and Human Resource Management

The fellows of the KDI, after they are hired, are subject to the promotion system of 'Associate Fellow – Fellow – Senior Fellow.' This procedure is quite similar to the 'Assistant Professor-Associate Professor – Full Professor' system of universities in the US, and follows recent trends for faculty promotions in Korea in terms of content and format. First of all, when considering the format, from the standard of the associate fellow who joined the KDI right after earning their Ph.D. degree, they get promoted as a fellow after six years through a promotion examination, and then again after five to six years they are appointed as a Senior Fellow through another promotion examination.

The Associate Fellow period is when the recruited people settle down as research personnel of the KDI. As a fresh Ph.D. graduate in their first job, they indeed need a certain amount of time to individually conduct and lead the research the KDI asks them for, or the policy research that contributes to the Korean economy. There are several reasons for this-the most important reason being the fact that they need a certain amount of time to thoroughly understand the reality of Korea. For example, even though they have earned their Ph.D. in Economics from the US on a certain area, they must engage in extensive literature reviews and data research to find meaningful research topics relevant to the Korean system and its policy environment, and secure a database needed for these research topics. Indeed, in the past, there was a time when research was considered important when it merely introduced the contents written in textbooks from abroad. However, as the economics field of Korea has developed and a wide range of researchers emerged, these sorts of introductory research has become meaningless. Needless to stay, much greater effort is required to write a policy report these days.

Eventually, the most important evaluation standard for an Associate Fellow to be promoted to a fellow is how much research he or she has produced that is good enough to receive recognition from colleagues in academia of the identical research field, government officials, etc. Also, for a fellow to be promoted to a Senior Fellow, the most important factor to be evaluated is whether he or she is able to conduct a comprehensive policy research project by collaborating with many other researchers of the selected policy area, and have the capability to contribute to setting the fundamental direction of the policy through these research projects.

Whether a fellow can be promoted or not is decided by the Promotion Committee. Considering the history of the KDI, there has been no report of a fellow being fired for not having met all the standards like U.S. based universities. However, there are quite a number of cases where when these standards are not met properly they have transferred to another job on a voluntary basis. A number of fellows that were passed up for promotion were promoted the next time. This shows that promotions within the KDI are not done automatically. As a result, the promotion examination is a stressful burden for the fellows, and they put much effort into producing research apt to meet promotion standards.

Within the KDI, a fellow is nicknamed the “Doctor of Development”. This means that fellows are not merely economists who write academic journals, but also should be recognized academically as well as recognized to have the capability to write reports that can be utilized for government policies. The promotion system mentioned throughout this section is essentially the vehicle for these fellows to grow into the Doctors of Development.

2.3. Summary and Evaluation

In this section, the overall structure of human resources of the KDI has been explained, including a more detailed explanation of the management and selection process of the fellows, or the core workforce that conducts research projects. For a candidate with a Ph.D. in Economics to become a KDI fellow and conduct contributive policy research for government policies, one must have the expertise of a relevant field, and the insight to view the overall economy from this perspective and come up with an adequate policy suggestion. To recruit and grow such intelligent personnel, the KDI has put much effort and resources since its foundation.

The efforts in the institution's dimension have been made mostly through official forms such as the recruitment procedure, promotion system, and the research facilities. However, what is as important as these aspects can be said to be the unofficial aspects, which are, the fellowship, peer pressure, and the leadership of the elder fellows. For example, KDI fellows make presentations of their work to their colleagues and receive comments on their work every year, starting from their recruitment seminar, throughout the overall procedure of the planning stage, mid-term assessments, and final reports on their research. In most cases, these commentaries are made in a very high quality arena, like that of academia in Korea.

The reasons why they share such strict evaluations and comments are because they believe that it is helpful for the person who conducted that research, for the commentator him/herself, and furthermore, for the KDI as a whole. The KDI publications are distributed widely to the government or academia, as well as to citizens through the media. Therefore, if a report is released with low quality, the reputation of the researcher as well as the KDI will be harshly criticized. To prevent this problem, the fellows of the KDI spare their time and take on an interest in each others' research projects by providing comments to enhance the overall quality of the research. In this sense, the research outcomes of the KDI is also a progress of the KDI as much as being a progress of the researchers themselves, along with their abilities and efforts put into those projects. In other words, when compared to research findings earned by research individually conducted by the same number of researchers, the outcome of the KDI tends to be of a greater quality, and this is the very reason for the existence of the KDI.

This sort of function is not always achieved in any organization. Therefore, the fellowship of the KDI is the core asset of the institute, and the main source of their competency. This asset cannot be achieved nor can it be continued without the conscious efforts of the members of the KDI. Thus, how to make and develop such an asset can be an endless assignment for the countries that are trying to make an organization similar to the KDI, as well as for the KDI itself.

3. Establishment of Affiliated Centers and Expansion of their Function

Since its foundation, the KDI had to withstand numerous research demands, and this was the very reason for its continued expansion in size. In this section, we will explain the expansion of the research institute from a different vantage point than research demands. In particular, this was the establishment of “Centers” or affiliated institutes.

The KDI, since the early 1990s, has expanded through added functions to its core mission by the affiliated institutes that were quite different from its original research function. [Figure 3-5] indicates the organizational structure of the KDI as of 2014, and <Table 3-5> touches upon the main tasks and scope of the affiliated institutes. As of 2014, the KDI has four centers and one graduate school as its affiliated institutes, as well as operating the main office. From the human resources aspect, the size of human resources in the affiliated institutes exceed that of the main office, which adds up to be a large proportion of the operations of the KDI.[73]

73. Refer to 〈Table 3-1〉.

Figure 3-5 | Organizational Structure of the KDI

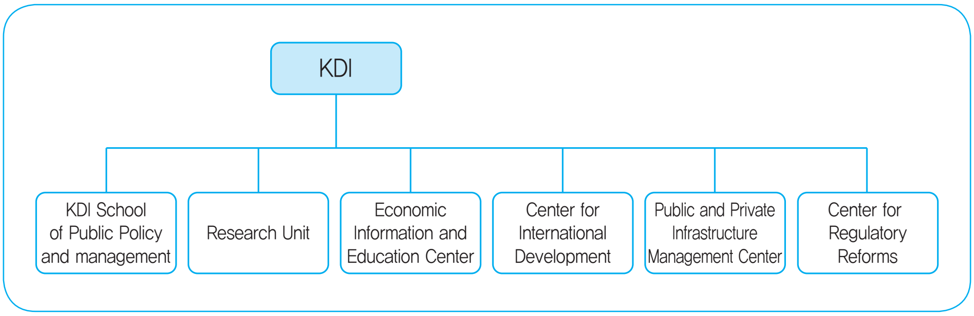


Table 3-5 | Affiliated Institutes of the KDI (as of 2014)

	Major Task	Employee (person)	Budget
EIEC	Economics education and policy promotions for the general public	62	1,35.55 billion Won
PIMAC	Major public finance related investment projects' feasibility assessments	104	
CID	Knowledge Sharing Programs (KSP) for developing countries	61	
Center for Regulatory Reforms	Analysis on influence of regulations	14	
KDI School of Public Policy and Management	Higher education on economic policies	98	37.48 billion Won
Total		339	1,73.03 billion Won

Note: Employees of Current Position were categorized as belonging to the main office.
Source: Refer to <Table 3-1>.

The functions of the affiliated institutes listed in the table above and the reason why they became affiliated to the KDI will be explained in detail. Nonetheless, the ultimate goal of this section is not the promotion of the tasks of these affiliated institutions. The establishment of these affiliated institutes and the expansion of the KDI followed by these establishments are the outcomes of the socioeconomic environmental change surrounding the KDI, and also the change in awareness of the reason for its existence. Moreover, the increase of affiliated institutions works as a force to bring fundamental change on the research function and the operation of the KDI. The below discussion will focus on such matters.

3.1. Economics Education

Among the affiliated institutes the KDI is operating as of today, the first one to be established was the Economic Information and Education Center (EIEC). The EIEC has been in charge of many different projects for the public to gain an appropriate understanding of the market economy and economic policies of the government. They are also in charge of conducting necessary public opinion polls.

The background for the creation of an institute of functions such as the EIEC is basically related to the economic situation in the 1980s. In the 1960s and the 1970s, the government interfered and controlled the market, allocating resources in the direction that leads to promoting economic development. However, as the economy grew, there appeared more disadvantages than advantages of such a method. Thus, the government curved the direction of the economic policy and shifted to an open economy based on the market since the 1980s. Many of the products' prices that the government used to control were now decided by the market, and the government banned many actions that disturbed the market order, achieving stability in the market order. In addition, the economic policy was inclined to opening the Korean market to the world. However, these policies were very new to the citizens because the citizens were more used to the previous method. Therefore, there were people unsatisfied with the government policies. There even were cases where the citizens' limited level of understanding of the economy hindering the execution of an economic policy.

In effect, the government realized that the degree of understanding on the economy by the citizens was important for economic development, as well as for the implementation of the economic policy, and thus decided to establish an institution to systematically fulfill these tasks. As a result, Korea Institute for Economy and Institution (KIEI), was founded in January 1990. The KIEI started off with economics education, and mainly conducted comparative research on the economic system.[74] Nevertheless, the KIEI was criticized since its foundation for having overlapping tasks to that of the think tank.[75] Also, while their goal was to make the citizens aware of the superiority of a market economy, the importance of this education decreased due to the collapse of socialists.[76] Therefore, the government dismantled the KIEI the next year in December 1991, and integrated it into the KDI.

74. EIEC Act.

75. Dong-a Ilbo, "Too many「Budget Wasting Research Institutes」", 1989.11.2. MK Business News, "Numerous Overlapping Research, Waste of Budget", 1991.2.24.

76. Dong-a Ilbo, 1991.8.7.

Afterwards, the fellows of the KIEI were also integrated as fellows of the KDI. While the tasks related to the education and promotion of the economy is handled by the EIEC, which is now an affiliated institute of the KDI, this continues on till this day.[77]

Currently, the EIEC is in charge of educating the public on the economy, and promoting economic policies of the government. They also hold economics education sessions for teachers in elementary schools, middle school and high schools. Also, the Annual Competition for high school students is held in order to enhance the economic knowledge of high school students. Moreover, they are in charge of promoting economic policies by using easier explanations through the monthly magazine 'Nara Kyeongjae (National Economy).' They are also in charge of holding public opinion polls related to the promotions. <Table 3-6> shows the current human resource size of the EIEC.

Compared to the time when there were discussions on the establishment of the EIEC 30 years ago, it is difficult to say that the importance and the necessity of national education on economics have been diminished. The government's interest on economics education targeting the citizens tends to be increasing. However, whether the tasks of EIEC are important is a different story from whether it is efficient to have such a task handled by an affiliated institution under the KDI. Many KDI fellows participate in teachers' education and the Annual Competition, and it is true that the activities of the EIEC has contributed to spreading research activities of the KDI. Nevertheless, the EIEC existing as an affiliated institute of the KDI was more due to historical reasons than efficiency.

Table 3-6 | Employees of the EIEC

(as of 2014)

	Employees (person)	Remark
Fellow	2	Including the Head of the Institute
Specialist	3	
Research Associate	51	Including the Senior Research Associates
Administrator	6	
Total	62	

Source: KDI Internal Data.

77. When first integrated, it used to be called the Economic Information and Education Center, however, its name changed to the current name in September 1998.

3.2. Higher Education related to Economic Policy and Economic Development

Since the 1980s, development of the Korean economy has become more visible, and thus the demand to learn the development experience from abroad has greatly increased. There has been discussions since the early 1990s to establish a higher education institution affiliated to the KDI in order to educate the government officials from abroad more systematically rather than through short-term training programs, which lasts for a few weeks. This was based on the educational model of having the actual personnel who conducted the economic policy research to give lectures that links the theory to the practice. Also, within the KDI, the incentive to reduce the turnover rate by establishing an affiliated graduate school also emerged.

Under such considerations, the KDI School of Public Policy and Management (KDIS) was open. KDIS is a graduate school without an undergraduate college, which pursues the goal of producing policy related master's degree holders. They especially focus on educating government officials from abroad, a certain proportion of the overall students consist of foreign students, various scholarships are provided, and all lectures are conducted in English.

<Table 3-7> shows the main factors of the KDIS as of the end of 2013. KDIS has a total of 30 professors and 68 employees, and there are 673 students, including both candidates for master's degree and Ph.D. With regards to the number of graduates, the total number of enrolled students increased continuously, the figure increased by almost eight times from 1999 to 2013 ([Figure 3-6]). While the ratio of foreign students was at first around 50%, the proportion decreased in the mid 2000s, yet increased again to the level of 50% recently. Among the domestic and international students, most of them are government officials of developing countries. After their graduation, they return back to their countries and help implement policies relevant to economic development.

The establishment of KDIS contributed also to increasing research human resources, as well as the expansion of the KDI's tasks. Currently, a majority of the professors at KDIS used to be fellows at the KDI. They are still in charge of policy research in collaboration with the KDI, as well as serving as members of the KDIS faculty. Meanwhile, in many cases the KDI fellows are also giving lectures at KDIS. As such, the fact that the KDI fellows are giving lectures based on their practical knowledge on the policy research, and also the fact that professors of KDIS are at the same time conducting numerous policy research, are drawing many domestic and international students to choose to study at KDIS.

One thing to mention is that, KDIS is growing to become a center for the development experience research of Korea. As the demand for learning Korea's economic development experience grew around the world, the needs for systematically conducting research on Korea's development experience is also growing. This research has been conducted mainly by KDIS professors. Also, such efforts enabled the KDIS to secure an area of lectures specialized by the KDIS, which expanded the virtuous cycle of education and research.

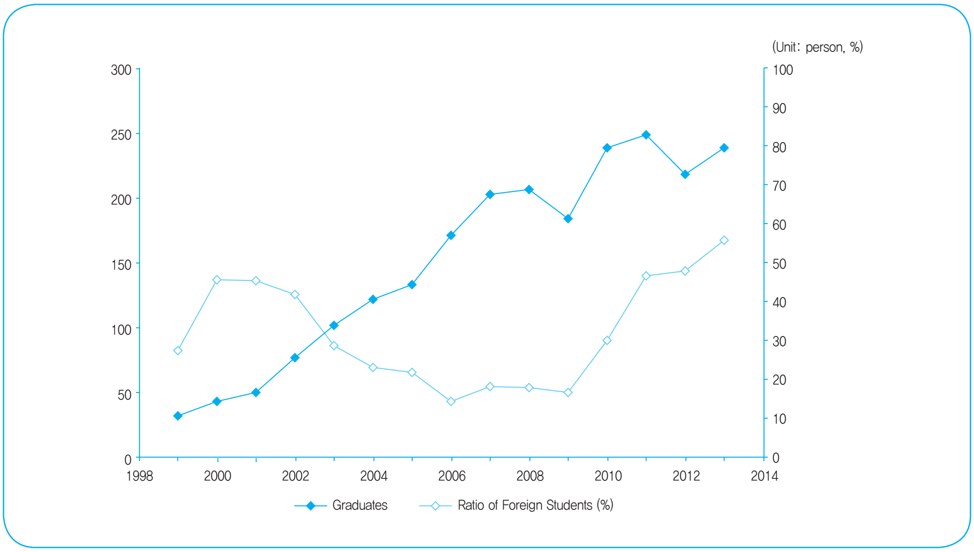
Table 3-7 | Outline of KDIS

(as of end of 2013)

		Number of Persons	Remark
Employees	Professors	30	Excluding Professors of Concurrent Positions and Invited Professors
	Employees	68	Permanent Contract Positions + Unlimited Contract Positions
Currently Enrolled Regular Students		673	Including both candidates for Master's degree and Ph.D.

Source: All public information in One (Alio).

Figure 3-6 | Number of Graduates from KDIS and Foreign Students Ratio



Source: KDIS Internal Data.

3.3. Public & Private Infrastructure Management[78]

When executing a large-scale national construction project such as the construction of roads, each government department decides whether to proceed with the project or not through a feasibility assessment of the project. However, in the past the feasibility assessment was not conducted properly due to many reasons such as the excessive demand estimation or political demands. Therefore, unnecessary investment or excessive investments were made, in many cases the budget had been wasted.[79]

The Ministry of Strategy and Finance (MOSF) came up with a method to execute the feasibility assessments of national projects by an independent institution to solve such problems. That very institution, the Public & Private Infrastructure Management Center (PIMAC), was founded in 2001 under the KDI. In April 1999 the Private Investment Support Center established under the Korea Research Institute For Human Settlements (KRIHS), was integrated into PIMAC in January 2005.

PIMAC, during its early stage after its foundation, conducted feasibility tests targeting construction projects of roads or railroads that costs more than 50 billion Won. These projects are, so to speak, "standardized" projects with clear factors to be considered, such as estimation of demand and computation of cost. However, the MOSF requested PIMAC to also conduct feasibility assessments on many different projects that involved large-scale budgets. As a result, preliminary feasibility tests by the PIMAC expanded from standardized projects to unstandardized projects, such as establishments of cultural facilities or science technology related support projects, of which the value estimation cannot be easily made. In addition, In-depth Evaluation on Fiscal Projects, which is an evaluation on whether the large-scale fiscal projects executed by the government is effective, became another major task of PIMAC.

Such activities increased the scope of PIMAC. In 1999, there had been around 20 preliminary feasibility tests, while in 2010 there were nearly around 100 assessments ([Figure 3-7]).[80] Other than these, when adding the In-depth Evaluation on Fiscal Projects and the Public Private Partnership (PPP) Evaluation, we can say that their tasks are continuously

78. About detailed explanation for PIMAC, and the preliminary feasibility tests, see KDI PIMAC (2014), and Kim (2012).

79. Kim (1999a), pp.5~9, Kim (1999b), pp.1~4.

80. After 2010, a decrease number of implemented projects is observed. The reason is because the report was written in the standard of the final publication. There are many cases where the final report for the preliminary feasibility tests is not finalized within the year of its actual assessment. Thus, the tendency seems to have experienced a decrease, yet the number of projects is not really decreasing as depicted in [Figure 4-4-3].

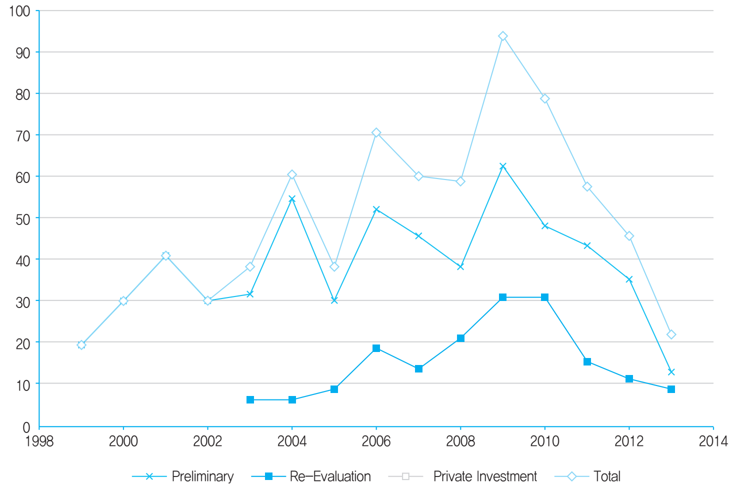
increasing. In effect, the number of employees continuously increased. <Table 3-8> shows the current number of employees of PIMAC as of 2014.

The reason for the expansion of PIMAC for the past decade was due to the great contribution on the efficient management of budget related to government projects. Today, PIMAC is known as a successful case of public & private infrastructure management among developing countries or international organizations. Many developing countries are trying to learn the efficient public & private infrastructure management method from PIMAC. What we should consider here is whether PIMAC would have been still successful had it been established as an affiliated institute under an institution other than the KDI, or had it been established as an independent institution.

We can consider two perspectives regarding these questions. First, for the tasks executed by PIMAC, there are basically various incentives involved, and there also are many cases that the interests of the persons involved are extremely sensitive. In other words, when the independence of the evaluating institution is not secured, it is very difficult to achieve an accurate assessment, and the result of the assessment is also difficult to be accepted. Considering these points, it can be said that having PIMAC under the KDI worked as one of the important factors for PIMAC's success. Second, while it is also true for standardized projects, especially for the case of unstandardized projects, a difficult task of estimating the social benefit from the project through an intense economic inference must be done. To execute such tasks, well-disciplined economists are needed, which can be found within the KDI. Therefore, we can say that the KDI contributed to the success of PIMAC in this regard.

However, it is important to note that the success of PIMAC was achieved by utilizing many resources of the KDI. Many of the KDI fellows while they belong to the main office of the KDI, they get to be involved in one or two projects of PIMAC per year, such as the preliminary feasibility tests. During this process, fellows are able to gain much experience and knowledge on the actual process of government policies. Nonetheless, in many cases these projects tend to be irrelevant to their own area of research. Thus, it is inevitable for them to sacrifice a portion of their time that should have been used for their research. Also, if a fellow belongs to PIMAC, a great portion of his task is the overall management of the preliminary feasibility test than being the analysis and evaluation of the specific project-in other words, their task is closer to being more administrative. Since the core success factors of PIMAC are professionalism, independence, and comprehensive insight, which are also the core assets of the KDI, it is quite difficult to separate PIMAC and the KDI – yet the KDI must input much of their resources into PIMAC, which induces a loss of resources, such a dilemma is something the KDI must overcome.

Figure 3-7 | Number of Projects by PIMAC
(In the standard of project report publication)



Source: KDI PIMAC (2014).

Table 3-8 | Employees of PIMAC

	Number of Employees	Remark
Fellow	8	Including 1 Head of the Institute
Specialist	35	
Research Associate	53	
Administrator	7	Including Interns and Dispatched Positions
Total	104	

Source: KDI PIMAC Webpage.

3.4. International Development Cooperation

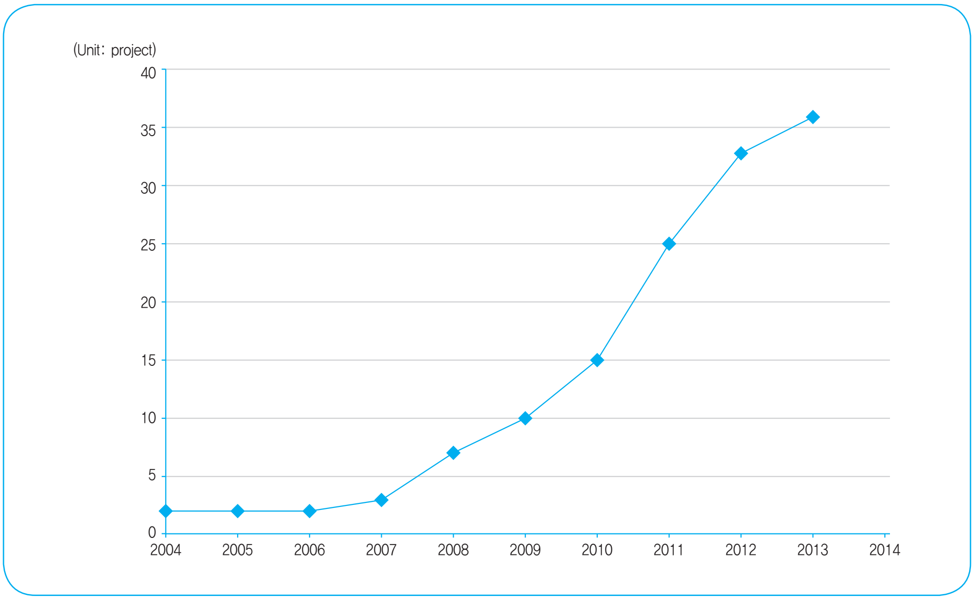
One of the major tasks of the KDI is to conduct the Knowledge Sharing Program (KSP) to provide economic development related consultations to developing countries based on the Korean development experience. In order to handle these tasks, the Center for International Development (CID) was established in 2010 as the affiliated institution.

The origin of the KDI handling such tasks goes back to the early 1980s. When Korea successfully achieved economic development soon after receiving development aid and consultations during the 1960s and the 1970s from foreign countries, many international organizations and developing countries started to gain interest in the Korean success case. As a result, the government invited government officials of developing countries to start the International Development Exchange Program (IDEP) in 1982. The KDI that provides consultations to the government on policies related to economic development becoming the institution to actually conduct such projects by receiving government budget, was a relatively natural progression.

After 1999 Korea was no longer an aid recipient country. In 2004 Korea became a member of the Development Assistance Committee of the OECD, greatly increasing the budget and tasks related to international development. During this process, KSP projects were kicked into high gear since 2004. At first, this Center operated as one of the departments of the KDI main office, however, in 2010, it became an independent center named the CID.

This expansion of organizational size was the result of an increase in KSP projects. In 2004 when the KSP project was first introduced, there were two target countries. However, there has been a rapid increase since then. In 2013 projects for around 30 countries were being executed ([Figure 3-8]), and the number of overall countries that the KSP project covered was 46 in total. The KDI continuously endeavored to secure needed human resources for managing these projects, there are 56 employees working at the CID as of 2014 (<Table 3-9>).

Figure 3-8 | Tendency of KSP Projects



Source: CID Webpage.

Table 3-9 | Employees of CID

(as of October 2014, Inters and dispatched positions are excluded)

	Number of Employees	Remark
Fellow	4	Excluding Concurrent Positions of other departments
Research Associate	37	Including Senior Research Associates
Specialist	3	
Administrator	6	
Total	50	

Source: KDI Internal Data.

The expansion of the organizational size of the CID created advantages as well as burdens for the KDI, not unlike other affiliated institutes. The KDI was able to expand its scope of tasks to areas related to worldwide economic development, and to secure the basis for greatly enhancing the reputation of the KDI. However, most of the tasks the CID handles are administrative, or managing the outsourced KSP project runners or the external research institutes. Recently, tasks such as systemization of the development experience within the CID, as well as the research trends of international development cooperation are being enforced. Therefore, the role of CID within the KDI are still being decided according to how these areas are organically related to the KSP projects, and how well the interaction between the research activities of the main office or the educational programs from KDIS and the CID can be achieved.

3.5. Center for Regulatory Reforms

After the Asian financial crisis in 1998, regulatory reform has become a rising issue for the Korean government. Whenever a new president was elected, they promised to proceed with sensational regulatory reform, and strived to achieve such promise. However, reform on regulations was difficult to achieve because there was a great deal of resistance by stakeholders. Obtaining cooperation among different government departments was not easy for a whole variety of issues.

To solve these problems, properly knowing the regulation itself as well as having an in-depth understanding of the regulations was necessary. Thus, the MOSF established the Center for Regulatory Reforms in 2013 as an affiliated institute of the KDI to have them be in charge of the regulatory reforms related to economics.[81] Since it is still in its early stages, the size is very small (Refer to <Table 3-10>) and it is difficult to evaluate the Center at the same level of other affiliated institutes. However, if this Center can become a pathway for research on regulatory reforms that can be reflected on actual policies, then it will be able to enhance the contribution of the KDI towards government policies.

Table 3-10 | Number of Employees for Research on Regulations

(as of October 2014)

	Number of Employees	Remark
Fellow	3	Excluding Concurrent Positions from other departments
Research Associate	8	Including Senior Research Associates
Specialist	1	
Administrator	2	Including Interns and Dispatched Positions
Total	14	

Source: KDI Internal Data.

81. The government divided the regulations into two categories of economic and other fields. The KDI was in charge of the former and the latter by Korea Institute of Public Administration (KIPA).

3.6. Summary and Evaluation

We have explained the functions of affiliated institutions of the KDI. These affiliated institutions are cases that have been established in reality, however, there have been many other potential affiliated institutions that were discussed in detail but eventually failed to be realized.

The similarities of the affiliated institutions except for KDIS are that, a large portion of the human resources is made of project management human resources rather than research human resources. For example, when the feasibility of a project is to be examined by PIMAC, the Project Manager (PM) who is in charge of the overall assessment, is from either PIMAC or the main office of the KDI – however, the benefit estimation or cost estimation, which are the core of the economic feasibility assessment, are all done by external human resources by making orders for their service. Likewise, for the KSP projects, which are the core task of the CID, the proportion of the project that is directly taken cared of by the internal staff of CID is about half among the projects covering 30 countries. The major task of affiliated institutions, such as PIMAC or CID, is more of a managerial one of the external human resources and helping them carry our their outsourced tasks, rather than directly executing the project by conducting research themselves.

What influence would adding such functions have on the KDI? The positive aspect is that establishments of those affiliated institutions contributed greatly to the expansion of the KDI. Expansion of the area of tasks resulted in the increase of influence of the KDI. However, there are many negative aspects as well. The biggest problem is the lack of flexibility of the organization. When the research human resources of the KDI take the role of the affiliated institution's tasks temporarily or permanently, it works as an obstacle for them to fulfill their original task, which is the research function. Also, another thing that should be considered is that it is a great loss for the research task or nurturing one's own ability when such research human resources are being utilized for project management or administrative work.

One thing we should take under consideration is the stance of the government or the policy demander. The government may go ahead and establish independent institutions that fulfill such tasks. However, they instead assigned the task to a think tank that, such as the KDI, in forms of a new affiliated institution. Here, the government thinks that by doing so it will have a better chance of ensuring the quality of the task, which is in fact an important reason for such expansion. Nonetheless, we should fundamentally contemplate whether the government is expecting the KDI to focus more on such administrative tasks and project management functions rather than the previous research functions. Whether such change within the government is desirable should be discussed, along with the fundamental question of what a think tank should be.

4. External Relations

4.1. Relations with the Government

The actual planning of the establishment of the KDI started since 1967.[82] At that time, what the main leaders of the establishment planned to make was a private research institute. Therefore, at first, they executed a plan to make a private institute just like other cases of developing countries with funding from the Ford Foundation or the Rockefeller Foundation of the US. However, this plan failed because the mentioned foundations were not interested in this plan. Instead, when Korea received the United States Operations Mission (USOM), the Korean government added some of the government fund, making a total fund of 1.31 billion Won to establish the KDI.[83]

The above process shows a very interesting perspective of KDI's establishment and history. Why did the people who propelled the establishment of the KDI plan to make a private think tank at first, rather than a government-sponsored think tank? Normally, the answer for this question would be because the government did not have enough resources. This can be an important reason indeed, however, it has many limitations to be a core reason. An economics research institution does not need much funding since it is different from any other science technology research institutes that require costly research facilities. Accordingly, as long as the government had the will to establish a research institute, it would have been possible to make one with ease.

Such inference is also backed by the lawmaking process for the research institute's establishment. At that time, the establishment of the KDI was based on the Korea Development Institute Act, and there seems to have been no drastic opposition or dispute.[84] Also, it seems that funding was not a problem for the government during that period because there were a few more organizations founded by the government before and after that time,

82. Chung ed. (2002), p.29.

83. Chung ed. (2002), pp.36, 40, 41.

84. National Assembly Finance and Economy Committee, "KDI Act Assessment Report", 1970.9.10. The 75th National Assembly Minutes of the Meeting of Legislation and Judiciary Committee No. 8, 1970.11.30. The 75th National Assembly Minutes of the Main Meeting No. 16, 1970.12.17.

such as the Agency for Defense Development (ADD, in 1970) and the Korea Institute for Family Planning (Korea Institute for Health and Social Affairs: KIHASA, in 1971).

The core reason for the founding leaders to have a private think tank in mind seems to have been to secure the independence of the research. The quality and direction of research can differ greatly by who provides the fund. The founding leaders thought, if the government supplies the fund, the think tank may not be able to grow as an independent institute working for the country, not merely working for a specific regime. The main idea of the establishment plan of a private research institute was to have an independent think tank, not only independent from other interest groups, but also independent even from the government. Indeed, trying to seek independence by depending on a foreign fund can draw much criticism in today's world. However, when considering the political and economic situations of that time, we can say that the purpose of the founding leaders was pretty clear.

Given this, the purpose of the KDI's foundation, securing the economists needed for the establishment of economic development plans, should be presented in a more delicate manner. It seems that the founding leaders of the KDI had more in mind for its role than simply being a functional and practical institute building and solving equations needed for the government's Five-Year Economic Development Plans. In other words, they were thinking the KDI's role should be planning the long-term development path, providing consultation to the government on what kind of policies are needed to achieve this goal. Therefore, they were planning to create, so to speak, a think tank beyond the influence of the regime and political parties.

Although the KDI was founded by the USOM and the Korean government's sponsoring in 1970, as well as having the main source of operation procured from government funding for the past 40 years, the aim to become a research institute conducting independent research has persevered. The early reports published by the KDI writes on its cover, the statement as follows; "This research institute is a non-profit corporation run by its own funds, thus the autonomy and the independence of the policy-oriented research activities are insured to the fullest." The primary members of the KDI were determined to realize such an ideal. As explained in Section 2, it is true for the KDI to have participated in the actual establishment process for the Five-Year Economic Development Plan, nevertheless, this was not their core task in the 1970s. Rather, what the KDI executed consistently along with the research on current issues was, the research seeking the direction for a long-term comprehensive economic development.

Such a goal created tension between the government and the KDI, straining their level of cooperation, but this tension still exists today. In the 1970s, the two major problems from such tension were the awareness of the economic situation and democratization. First, about the awareness of the economic situation, while President Chung-Hee Park was pursuing export-oriented rapid economic growth, the KDI emphasized the importance of economic stability along with the importance of economic growth. For example, as aforementioned in Section 1 of this Chapter, the report titled "Decision for the Selection of New Policy" published in the name of President Mahn Je Kim in June 1972, contained very radical contents that asked the government to change its overall policy direction at that time.[85] Related to the political situations, due to its characteristics of being an economics research institute, the KDI seems to have not published any reports related to political issues. However, since the KDI was the most active organization to have interaction with organizations abroad at that time, there were many cases that KDI reports or the comments by foreign scholars participating in conferences held by the KDI were inadvertently political criticisms.[86] It was inevitable for helpful suggestions on economic policies to accompany a certain degree of criticism, and this tends to be seen as a political criticism.

There were many factors for the KDI to be able to suggest many constructive yet critical ideas on government policies, despite being a government-sponsored research institute. First was the relation between the Economic Planning Board, which was "in charge of" the KDI. The Economic Planning Board is in charge of planning the overall economy rather than actually executing practical tasks like the Ministry of Finance or the former Ministry of Trade and Industry (MTI: currently Ministry of Trade, Industry and Energy: MOTIE). Therefore, the Economic Planning Board used to think with more flexibility.[87] In that aspect, the government officials of the Economic Planning Board had a broad and good understanding of the ideas of fellows in the KDI. More fundamentally, the Economic Planning Board had maintained their stance of relatively criticizing the problem of the

85. Kim (1972).

86. For example, Professor Edward Mason who was one of the authors of "Studies in the Modernization of the Republic of Korea" wrote in one paragraph of his portion of a paper a criticism about President Chung-Hee Park. This writing was also translated into Korean, thus, there was a chance to create a stir. During that time, the KDI was worried about how to solve this problem. However, President Chung-Hee Park was killed during the preparation of the publication. Therefore, such a problem was solved without much trouble. Chung ed (2002), pp.159~161.

87. Kang (1992), pp.11~12; Kim ed. (1999), pp.104~111, 223~225.

economy's instability and distortion onto the implementation of export-oriented economic growth and heavy chemical industry policies by President Chun-Hee Park through the MTI and the Ministry of Finance. They shared their ideas with the KDI, forging a close relationship.[88]

Second was President Chung-Hee Park. According to the recordings of the Enlarged Meeting for Export Promotion, the president used to feel uncomfortable about the opposing ideas presented by "so-called economic experts."[89] When considering the authoritarian regime of that time, the existence of a research institute such as the KDI is quite noteworthy, especially its ability to survive without any special treatment by the government despite such complaints from the President. As such, the generous attitude of President Chung-Hee Park on the KDI, to "respect yet neglect" the KDI has worked as an important factor for the existence and the development of the KDI. Moreover, such actions by the President also prevented other government offices from being disrespectful to the KDI as well.

Lastly, we can never underestimate the efforts of the researchers of the KDI, including President Mahn Je Kim. Although they may collide with the policy direction of the government, they did not hesitate to present their ideas that may benefit the nation, and discussed such issues with the policy authorities. The reason for such bold actions to be possible was basically due to their expertise on their research. Also, suggesting the arguments through empirical evidence utilizing the Korean data was the way to overcome the limit of being regarded as a US economic logic that does not fully understand the reality of Korea.

The incident that brought a dramatic change to the relationship between the KDI and the government of the 1970s, was the change in direction of the economic policy that occurred in the 1980s. Although it is considered a slightly unofficial history, President Doo-hwan Chun, who seized power through a coup d'état, had complete trust in Senior Secretary Jae Ik Kim, at least for economic policies.[90] Senior Secretary Jae Ik Kim and major government officials on economic issues at that time set the primary goal to realize economic stability. They also pushed ahead the transition from a government-led economy to a market-based economy. In addition, they implemented various efforts to seek economic growth through reorganizing the economic order by opening the market, the real-name financial transaction system, and settlement of the fair trade regulations, etc.

88. Beyond the aspect of sharing the policy directions, there were personal ties between the Economic Planning Board and the KDI. Regarding this matter, see Chung ed. (2002), and Lee (2008).

89. For example, Rhee, Younghoon et al.(2013), Book 3, p.613.

90. Koh and Lee (2013), Ch.4, Lee (2008), p.27.

Such government policy directions changes resulted in harmonizing the government and KDI's ideals. As aforementioned, such change was not an inevitability. Even though the economy was experiencing growth, the policy direction may not necessarily become market friendly, and it is not easy for the policy direction to be maintained consistently. Such change of policy directions by the government in the 1980s was realized due to changes in economic condition along with many historical coincidences, and the accumulation of research and persuasion for change by the KDI on such policy direction since the 1970s. In this regard, how the KDI was able to greatly contribute to the Korean economy throughout the 1980s and the 1990s can be said to be the result of the endogenous effect of economic development, the government's policy direction change, and KDI's effort.

While such market friendly and open-market economic growth pursued, another change in the relation between the government and the KDI occurred during the 1990s. The first engine to bring about the change was the objective conditional change. As the openness of the Korean economy was enhanced and many economic experts were recruited, the relative advantage of the KDI gradually decreased. Moreover, while the grand direction of opening the market and regulatory reform were shared throughout the society, there were new demands for in-depth and continuous investigation on each individual issues. The establishment of affiliated institutions such as PIMAC or Center for Regulatory Reform was an effort to satisfy those demands.

These changes resulted in bringing two fundamental changes to KDI. First was that the tasks of the KDI became more similar to those of the government, which also resulted in bureaucratization. Second, since the human resources for providing long-term comprehensive policy suggestions were allocated towards the affiliated institutions' tasks, it was inevitable to face a decrease of human resources available for the original research function. From now on, how to wisely overcome these obstacles will be the key factor in fulfilling the original tasks of the KDI.

4.2. Relations with Other Research Institutes

After the KDI and the Korea Institute for Health and Social Affairs opened in 1971, each government branch continued to create government-sponsored think tanks that conducted research related to their tasks. As a result, among the currently existing think tanks in Korea, 17 were established by 1990, and even during the 1990s, many research institutes were founded. (See <Table 2-1>).

The establishment of government-sponsored think tanks took a major role in the reasonable planning and implementation of government policies. However, there were many repercussions from such a phenomenon. Most of all, since each government branch competitively established and operated their own think tanks upon their needs, several research institutes' tasks overlapped, sparking many criticisms of wasting government budget.[91] Between the government offices and the research institutes in charge of such tasks, some sort of a hierarchy was formed. Therefore, rather than conducting research for the nation as a whole, such think tanks were often used as a tool to reflect their affiliated government office's voice. Also, there existed a tendency for such think tanks to conduct posteriori research to suggest the logic for policies implemented by the affiliated government office, rather than conducting an anticipatory research related to the policies. Ultimately, when considering the budget input to these research institutes, they were criticized as to whether they were in fact producing an adequate research outcome to warrant the invested amount of funds.

Due to these problems, continuous brainstorming on how to effectively operate these think tanks was made. In 1980 there was an attempt to unify all research institutes into a single organization.[92] Due to the drastic reform of government organizations in 1998, a full-scale discussion on how to solve such problems took place as a means of redefining the relationship between the government offices and the research institutes.[93]

As a result, the government established the National Research Council for Economics, Humanities and Social Sciences (hereafter, NRCS) under the Prime Minister's Office in 1999, and transferred 23 government-sponsored think tanks to be controlled by the NRCS.[94] The NRCS system has been introduced in order to primarily solve the problems induced by having research institutes affiliated to a certain government office. By doing so, they sought an organizational basis for the research institute to conduct more independent research. At the same time, they tried to unite all research institutes to achieve the goal of conducting a comprehensive research. Nonetheless, there have been criticisms whether such a system is

91. Kyunghyang Shinmun, 1989.7.27., MK Business News 1991.2.24.

92. Chung ed. (2002), pp.331~332.

93. Dong-A Daily News 1998.1.12.

94. The Korea Council of Economic and Social Research Institutes and the Korea Research Council for Humanities and Social Sciences were established in 1999, but those two were merged into the National Research Council for Economics, Humanities and Social Sciences (NRCS) in 2005. Regarding the history, see the National Research Council for Economics, Humanities and Social Sciences (NRCS) webpage.

accomplishing the previously sought expectations, and at the end of the 2000s, discussions on another government-sponsored think tank reform were presented.

The introduction of the NRCS system also brought many changes to the KDI. One of the most noteworthy structural change was that it became an affiliated organization of the NRCS instead of being under the control of a certain government branch such as the MOSF, which is what happened to other think tanks. At the same time, some attributes that the KDI was able to enjoy were now not permitted. In other words, as the KDI became a research institute under the NRCS, the same regulations for its budget operation are identically applied to the KDI as they are with any other research institute. Therefore, the KDI had to give up some of the benefits they enjoyed in the past.

However, a fundamental problem the NRCS system change brought about was the change in the KDI's very existence. While there already are numerous professional research institutes in the area of economics, such as public finance, industry, trade and labor, when NRCS was created to be in charge of managing comprehensive research, there were discussions as to whether could the KDI was still needed as a comprehensive research institute.

In-depth discussion to answer this question goes beyond the scope of this report. Nonetheless, two important facts can be derived from the discussions developed until now. First, a comprehensive insight in order to recognize and make decisions of the national economy as a whole is extremely important. Second, a comprehensive insight cannot be created merely by arithmetically adding up all research outcomes of many other departments. In short, even though there exists many different research institutes of various departments, combining the research outcomes from each research institute and transforming it into a comprehensive overview is, by itself, a task that must be achieved through comprehensive efforts by qualified human resources with relevant expertise.

There can be many opinions on who should be responsible for such a function to achieve the greatest efficiency. However, in Korea, the KDI has been in charge of this function for the past 40 years. Also, the reason the KDI has managed to fulfill this function in a relatively successful manner originates from a combination of its historical background as a comprehensive economics research institute, and the internal environment that the fellows of the KDI who conduct research on a variety of professional areas all closely interacted within the organization, and the conscious endeavor to maintain and further develop such an environment. Moreover, fundamentally, as the KDI continuously recruited human resources capable of realizing a comprehensive picture while conducting their research, –

by recruiting intelligent human resources capable of having their own expertise and at the same time able to consider the economy as a whole, nurtured such a workforce to be able to achieve that goal. By having more human resources join the KDI to enjoy such a benefit and work environment made it possible for them to generate the virtuous cycle of development.

The success of the KDI was achieved thanks to the will and endeavor of the members of the KDI and the government authorities during the historical process of the past 40 years. It is indeed impossible to make such an organization in a day. This is the very reason for countries that wish to have government-sponsored think tanks that contribute to economic development to ruminate and contemplate not only the current state of the KDI, but also its historical path.

2014 Modularization of Korea's Development Experience
Think Tanks of Korea:
Contributions to Economic Development and Their Evolution

Chapter 4

Conclusion

Conclusion

After World War II, the economic development process of developing countries incorporated an important factor, one that was different from the U.K., which achieved the very first Industrial Revolution. That is, the pivotal role of the government. The Industrial Revolution of the U.K. was a product of modern economic growth that resulted from the natural occurrence of technological innovation by ordinary activities of economic players. However, developing countries that planned to achieve economic development after the World War II, as well as industrial European countries following the U.K., have benchmarked the U.K. or other developed countries as their model, and the government actively led the way to achieve economic development. The case of Korea is often mentioned as the representative case of a government succeeding in leading the country's economic development.

In order for the government to lead the economic development, the policy authorities must have an in-depth analytic skills, a broad understanding on the economic development, and the insight to aptly forecast economic issues. However, the policy makers in the developing countries, as well as those of the developed countries, generally do not have such information or the capacity given a lack of objectivity, among many other reasons. This goes for academia, media, and politics. Therefore, even though there is a request from the government, the private sector is often unable to provide appropriate information or the consultation that can be practically utilized for policy implementation. In such situations, the suggestions or criticisms from the private sector on major policies, and the response of the government, may end up being a waste of time rather than becoming a productive discussion, yielding no real contribution to economic development.

As one of the methods of solving these kinds of problems, the governments of developing countries try to produce information of high value and consultations needed for the establishment and implementation of economic policies. This was the very reason many governments established government sponsored research institutes. The government of the Republic of Korea was not an exception. Starting with the foundation of the Korea Development Institute (KDI) in 1971, the Korean government has continuously established think tanks to conduct research in various fields for the past 40 years that has provided needed consultation for formulating policies.

Including the KDI, think tanks in Korea not only produced publications on research papers, but also provided high quality consultations on the core issues the government was facing, and the future path of the Korean society through close collaborations with policy authorities. Also, the policy authorities referred to these consultations to plan, make amendments on, or implement the policies. Also, they have contributed to enabling the citizens to have a correct understanding of the government policies by announcing their research results or presenting their opinion on major policies in the form of news articles or interviews. As a result, think tanks, including the KDI, are evaluated to have greatly contributed to the economic development of Korea.

Based on Korea's experience, what kind of qualifications should newly established think tanks in developing countries have in order to fulfill expectations? The case study on the KDI emphasizes three qualifications. First is having the human resources able to conduct research that contributes to developing the national economy. During the late 1960s, Korea did not have a sufficient pool of human resources that could actually contribute to economic policies. To overcome these limitations, the persons who took the initiative to establish the KDI persuaded the people who have Ph.Ds. from abroad to work for the KDI. Once the highly educated human resources were secured, a high quality research outcome was able to be produced by the research institute, and this raised the status of the research institute. This is in turn created a virtuous cycle of attracting more intelligent researchers to join this research institution. Moreover, there have been additional efforts to increase the ability of these secured human resources to their maximum. Therefore, the groundwork for conducting sound policy research in a continuous manner was realized.

Second was securing the independence of the research. While the KDI conducted research projects that supported government policies or conducted research on the practical issues needed for implementing those policies since the early 1970s, the KDI fundamentally reexamined the government policy and did not hesitate in suggesting changes to the direction of a policy when it was necessary. The most representative cases were when KDI argued in the early 1970s that the policy to overtly increase the economic growth rate must be controlled, or when in the mid-1970s they conducted a research for market-friendly competition policy and insisted that the government policy must be changed. The KDI not only simply supported the government-led policies in a posteriori manner, but also evaluated the government policies from the viewpoint of the overall development of the national economy and also made necessary suggestions, the KDI was able to truly help formulate government policies that contributed to economic development. The fact that the KDI was independent is an important factor and its ability to attract capable human resources cannot be overemphasized.

Third is the government's attitude that allows the research institute's autonomous research. Policy authorities in many countries, as well as those in Korea, expect the government sponsored research institutes to conduct research supporting their policies. Considering these situations, it is not easy to conduct research in the direction that can be, in a sense, interpreted as being critical to the policies, just like how the KDI had done. The reason why the KDI was able to proceed with this function since its foundation was because the Economic Planning Board, and even the president of the Republic of Korea – the person with the highest authority – well understood the role of the KDI. In other words, even though the KDI made an argument that did not please the policy authorities, the government did not eliminate the KDI, nor did it prevent the KDI from making its arguments. This kind of approach by the government actually provided the groundwork for the KDI to conduct research for the nation, not for a specific political regime or for the government only. And thus the credibility of the KDI, created as such, became the very asset for the government was able to pivotally utilize afterwards. In other words, the KDI was able to successfully handle the tasks, such as the preliminary feasibility test, which only highly independent institutions are able to carry out, and eventually contributed to having the government policies be executed effectively.

Lastly, this kind of think tank was able to grow based on the aforementioned three factors, thanks to the endeavors of the members of the KDI. Even though a superb environment is set up, when the members are not dedicated to putting their greatest efforts into their work, it will be impossible to achieve such outstanding research progress. Also, no matter how hard the researchers as individuals thrive to do their best, in situations where the members of the group are not willing to interact with each other nor wanting to actively share their ideas, it is extremely difficult to achieve outstanding research outcomes. All members of the research institute should have in mind that all research progress of the institute is also theirs to share, by having interest in research projects conducted by others within the institute as well. Also, all members of the institute must have a sense of responsibility that one's own research outcome may affect the reputation of the research institute as a whole, thus motivating them to do their bests. This is the ultimate driving force in making a research institute contribute to the development of a nation.

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The History and Functions of Think Tanks[95]

1. The History of Think Tanks

In a broad sense, the origin of think tanks can be found from individual advisory or supervisory groups. Scholars who used to be the counselor for an emperor or the private professor of a prince, or the strategists who were the military experts during a war in a monarchical country in the past can be such examples. These are all types of field experts who acted as a kind of think tank during that time, however, it is quite far from being a modern type think tank. It is common to consider the first creation of modernized think tanks similar to the ones of these days to have occurred in the United States. As for the origin of the US think tanks, there are three arguments (<Table A-1>).

Table A-1 | The Development Think Tanks in the U.S. by Chronology

Development Stage	Characteristics	Representative Institutions
1st Generation: Early 20th Century	○ A sophisticated social gathering of intelligent people to discuss their interests and current issues ○ Major philanthropists funded their research field of interest ○ Exchanged information regardless of their political view	World Government Institute (1916) Carnegie Foundation (1910) Hoover Institution (1919) Foreign Affairs Committee (1912)
2nd Generation: Around World War II	○ Provided consultations on diplomatic policies to policy decision makers. ○ Compared to the 1st generation, they became more active in seeking alternative solutions for policy ○ Created analyses or expectation reports that was not easy for the government to conduct by itself	Rand Corporation (1948) American Enterprise Institute (1960) Hudson Institute(1961) Urban Institute (1968)
3rd Generation: After the 1970s	○ Actively participates in political disputes ○ Exercise their political power as 'Idea Brokers' ○ Introduced the marketing theory to enforce their promotion in order to realize their political suggestions	Center for Strategic & International Studies (1962) The Heritage Foundation (1973) Cato Institute (1977)

Source: Kang, Wontaek et al. (2006), reorganized.

95. I would like to note in advance, that the discussion in this Appendix is rather a reorganized version of the discussions already mentioned in Kang et al. (2005) and McGann (2005, 2012, 2013) than a creative research.

The first argument is the '19th Century Origin Theory.' The first ever think tank recorded in history was the 'Franklin Institute' founded in 1824. Benjamin Franklin was an educated person with a very unique character of which was a combination of a radical intellectual, a projective pioneer, and a pragmatist. The Franklin Institute developed many different technologies and provided the government or an industry social contributions. This is why it is noted as being similar to current think tanks. However, these sort of activities were far from having the modern meaning of policy developments, and this is also not capable of being a gathering of intellectuals for policy formulation.

Nevertheless, the significance of the 19th Century Origin Theory is that during this time many organizations were created to facilitate the federal government's reign. Many organizations provided solutions on major issues in the 19th century such as the peasant migration, immigrants issue, and the role of the federal government. Well known examples are the National Association of Social Advancement of Science founded in 1863, the Massachusetts Bureau of Statistics founded in 1869, and the American Economic Association founded in 1885. While the American Economic Association is especially well known for the level of their experts and their social impact, it is evaluated to have elements of a modern think tank to a great extent.

However, these organizations were not keen to oblige the demand of politics, nor did they have a continuous incentive to provide policy suggestions to the government. They were not given the opportunity to be involved in the decision making of a policy. Due to these reasons, it is more reasonable to consider this organization as a pre-modern form of a think tank.

The second argument is the 'Post-President Woodrow Wilson Origin Theory.' After the late 19th century, there were a sharp increase of population that received higher education, which led to a proliferation of many highly educated experts involved in politics. This was how the group of people with expertise started to participate in politics. This phenomenon mainly started from economists to emphasize the efficiency and productivity as important roles of the government. Moreover, with economic expansion, many expert groups had been created to provide supervision on current issues.

The election of President Woodrow Wilson in 1912, who was a former president of Princeton University, was an opportunity for policies to become more professionalized in formulation, implementation, and evaluation. The Rockefeller Foundation established in 1913 and the Institute for Government Research, or IGR, established in 1916, are the representative expert groups during that time.

While these kinds of expert groups appeared at the forefront during the time President Wilson was in power, they still had their limitations and failed to become an institutionalized policy development organization. Nevertheless, due to the fact that the government was able to gain human resources and policy ideas outside of the administrative office, it is evaluated to be the very first modern day think tank. The most noticeable is the IGR, because it is a think tank with the characteristic of an institutionalized organization founded mainly by scholars and government officials. This research institute was reborn as the Brookings Institution in 1927 by Robert Brookings. People who argue the 'Post-President Woodrow Wilson Origin Theory' insists this think tank is the world's initial think tank.

Nonetheless, many organizations during this time are quite different from a think tank in the modern sense of the term. This is because, while these organizations of policy experts were established according to the demand of a political leader, they were not able to develop policy solutions from the perspective of managing the state. Most importantly since most of the think tanks founded after this time supported a certain ideology or pursued the value of promoting a specific leader and having gone through development mainly by elections, the think tanks of this time are different from the ones that emerged later.

The last argument is the 'World War II Origin Theory.' People with this point of view focused on the fact that think thanks endeavored to develop policies to satisfy the diverse social demand targeting the general public, not merely trying to fulfill the needs of a specific politician. And by applying these standards, they consider the RAND Corporation, founded in 1948, as the initial think tank in the modern sense. After that, numerous similar types of organizations in the economic, military, and diplomatic field were created till this day. Under the Cold War situation, which was a special phenomenon in the global society after World War II, the US government needed an organization to conduct many policy research that the government were not able to officially execute regarding the conflict with Eastern European countries, including the Soviet Union as a leading country. With the start of the Cold War, the US has allocated a huge amount of resources in order to efficiently demonstrate their power as the top military power. During this process, think tanks mainly focused on achieving the integrated goal of allocating the right professional to the appropriate position and developing policies. Through this, think tanks were able to secure the position as a major political actor. The status of military specialists and economic specialists within the government were raised to an extremely high level, and their impact on the government also grew immensely.

Meanwhile after the 1970s, think tanks were introduced as the actual policy development institutions. They applied the sales concept in order to actively develop new ideas and promoted those who expanded their impact in society. Think tanks also supported candidates and political parties that aligned closest with their own political standpoint. Through the roles of giving overall policy suggestions, forming of public opinion, and producing politicians, these think tanks were able to exercise great impact outside the government along with the press.

2. Types of Think Tanks

Think tanks can be categorized into many types according to what entity it belongs to, organizational structure and its corporate culture, and political-and-philosophical preference. McGann (2005) categorized the think tanks in the US into four major types according to the organizational structure.

First are the think tanks of academic characteristics. These kinds of think tanks can be divided into two categories according to the scope of their research; one as a general research institute and the other a think tank of a specific professional field. First, think tanks as a general research institute is an organization that analyzes a wide variety of integrated policy issues on the economy, diplomatic policies, environment, etc. Such examples are the Brookings Institution, American Enterprise Institute, Center for Strategic and International Studies, etc. These organizations are related to academia and are categorized according to the category of school systems set by universities, and they tend to be independent without a parent organization. Also, the characteristics of the output or the compensation system may be similar to that of a university, and those organizations tend to also cover long-term research topics. Next are the think tanks that focus mainly on specific fields such as the economy or renovation of welfare policies. The most representative example is the National Bureau of Economic Research (NBER). These organizations are similar to the general type of think tanks in many aspects-however, they tend to be more professional and relatively focused more narrowly on a specific research topic, and in many cases there are specific fund providers or a client.

Second types are think tanks conducting research or consulting activities by contracts. These institutions mostly do their research and analyses to support government institutions. Examples are the Rand Corporation or the Urban Institute, etc. These institutions continue to keep close connection with government institutions and act as a sort of a policy or program consultant. Thus, the research they conduct tends to be relatively closer to analyzing a policy than being academic. Also, the research output is more applicable for the specific contractor institution rather than being applicable nationwide. These institutions tend to have a company structure and culture similar to that of a consulting firm, and it is normal that the researchers are only allowed a limited level of freedom.

Third, there are think tanks supporting a specific organization or an opinion. These institutions are usually involved in activities promoting a certain opinion, and in many times their research direction tend to have a strong characteristic of being inclined to a certain political party. Think tanks such as Citizens for a Sound Economy or Cato Institute are good examples. The purpose of these institutions is to participate in activities supporting a certain group or a constituency, ideology, political party, or a political party's platform, etc. Also they reject policy analyses that are academic and technocratic. Thus, the organizational structure is formed according to that purpose.

Fourth, there are think tanks of characteristics similar to that of policy enterprises. These institutions thrive to praise their policy recommendations and ideas, and try to commercialize them. They are formed according to the firm's effectiveness and efficiency criteria. Also, they apply business administration, marketing, and sales criteria onto the public policy research. These institutions therefore criticize overtly academic think tanks that do not satisfy the needs of the policy planner. They provide research conclusions in a short summarized form almost similar to a news article for busy public servants or politicians. They also have a very tight schedule ahead of them to continuously create their outputs, just like a daily newspaper. The compensation for each human resource input for their research is calculated based on the output, according to how related the output is to the execution plan and in accordance to their tight schedule. The representative organizations are the Heritage Foundation and the Economic Policy Institute.

Other than the ones mentioned above, McGann (2005) introduced research institutes related to the parliament, government facilities, universities, and private companies. However, he does not make a detailed analysis on such institutions. The reason for this seems to be the fact that such institutions are merely an exception, and there are only a few of such institutions. This also occurs similarly in the US, where the think tanks are the most active, but also in the western European region where think tanks are also very active. However, while I will explain in detail in Section 3, there seems to be a great difference between the general think tanks mentioned above and the Korean think tanks. Even in terms of the form of the Korean think tanks, most of them tend to refer to government-sponsored think tanks, which are quite different from the ones mentioned above.

3. Regional Distribution of Think Tanks

According to McGann (2012), the total number of think tanks in the world is 6,545 as of 2011. The regional distribution of think tanks is indicated in <Table A-2>. Among the overall think tanks, 30% or 1,912 are located in North America and 19% or 1,258 are located in Western Europe. Thus, a regional concentration or regional bias in these two regions are observed by having almost half of all think tanks in the world located there. This seems to imply that the developed economic, social, and political status of these regions.

Table A-2 | The Number and Percentage of Think Tanks in the World by Region

Region	Number of Think Tanks	Percentage of Total (%)
North America	1,912	30
Western Europe	1,258	19
Asia	1,198	18
Latin America and the Caribbean	722	11
Africa	550	8.4
Eastern Europe	537	8
Middle East·North Africa	329	5
Oceania	39	0.6
Total	6,545	100

Source: McGann (2012).

McGann (2012) categorized the above in more detail to list the number of think tanks by country. The think tanks in the US are overwhelmingly abundant at 1,815 think tanks. This is equivalent to almost 28% of the total number of think tanks in the world. The countries with more than 100 think tanks are as follows: China (425), India (292), Great Britain (286), Germany (194), France (176), Argentina (137), and Japan (103). As indicated in the chart, there exists a tendency for developed countries, populous countries, or countries with a large economy to normally have many think tanks. On the other hand, think tanks are hardly found in underdeveloped countries. As shown in the chart, there are many countries with no think tanks at all. At large, 182 countries among a total of 213 countries in the world, which is equivalent to 85.4%, have at least one think tank.

Table A-3 | The Number of Think Tanks by Country

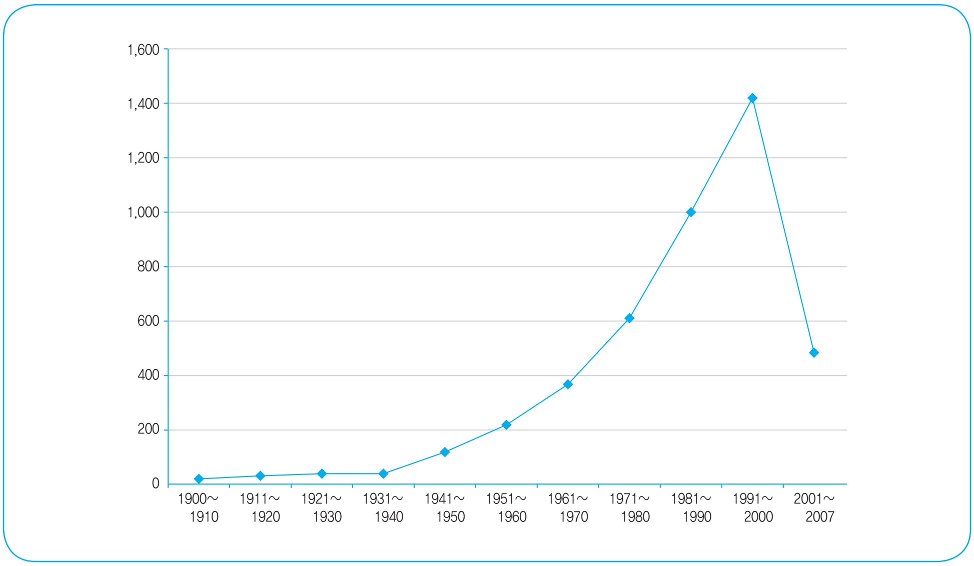
Africa		Asia		Eastern Europe		South America		Middle East	
Angola	4	Afghanistan	6	Albania	11	Anguilla	0	Algeria	9
Benin	14	Armenia	14	Belarus	12	Antigua and Barbuda	1	Bahrain	3
Botswana	13	Azerbaijan	12	Bosnia	13	Argentina	137	Cyprus	6
Burkina Faso	16	Bangladesh	34	Bulgaria	33	Aruba	0	Egypt	34
Burundi	5	Butane	1	Croatia	10	Bahamas	2	Iran	32
Cape Verde	2	Brunei	0	Czech Republic	26	Barbados	7	Iraq	29
Central African Republic	2	Cambodia	10	Estonia	17	Belize	4	Israel	54
Chad	3	China	425	Hungary	39	Bermuda	3	Jordan	16
Comoros	0	Georgia	12	Kosovo	3	Bolivia	51	Kuwait	11
Congo	3	Hong Kong	27	Latvia	11	Brazil	82	Lebanon	12
Republic of the Congo	7	India	292	Lithuania	19	Virgin Islands(British)	0	Libya	1
Côte d'Ivoire	12	Indonesia	20	Macedonia	15	Cayman Islands	0	Morocco	11
Djibouti	0	Japan	103	Moldova	9	Chile	41	Oman	2
Equatorial Guinea	0	Kazakhstan	8	Montenegro	4	Colombia	40	Palestine	28
Eritrea	5	Kyrgyzstan	8	Poland	41	Costa Rica	37	Qatar	6
Ethiopia	25	Laos	3	Romania	54	Cuba	19	Saudi Arabia	4
Gabon	0	Macau	0	Russia	112	Dominica	3	Syria	5
Zambia	6	Malaysia	17	Serbia	24	Dominican Republic	28	Tunisia	18
Ghana	36	Maldives	6	Slovakia	19	Ecuador	18	Turkey	27
Guinea	2	Mongolia	7	Slovenian	19	Guyana	3	United Arab Emirates	6
Guinea-Bissau	1	Myanmar	0	Ukraine	47	El Salvador	13	Yemen	15
Kenya	53	Nepal	13	Total	537	Grenada	1	Total	329
Lesotho	4	Democratic People's Republic of Korea	2			Guadeloupe	4		
Liberia	3	Pakistan	19	**Western Europe**		Guatemala	12	**North America**	
Madagascar	5	Philippines	20	Andorra	1	Guyana	3	Canada	97
Malawi	15	Singapore	6	Austria	40	Haiti	2	United States of America	1,815
Mali	9	Republic of Korea	35	Belgium	53	Honduras	9	Total	1,912
Mauritania	2	Sri Lanka	14	Denmark	43	Jamaica	7		
Mauritius	7	Taiwan	52	Finland	28	Martinique	2	**Oceania**	
Mozambique	4	Tajikistan	7	France	176	Mexico	60	Australia	29
Namibia	14	Thailand	8	Germany	194	Montserrat	0	Fiji	1
Niger	4	Turkmenistan	0	Greece	35	Nicaragua	10	Kiribati	0
Nigeria	46	Uzbekistan	8	Iceland	7	Panama	12	Marshall Islands	0
Rwanda	7	Vietnam	9	Italy	14	Paraguay	27	Federated States of Micronesia	0
São Tomé and Príncipe	0	Total	1,198	Liechtenstein	90	Peru	32	Nauru	0
Senegal	16			Luxembourg	2	Puerto Rico	5	New Zealand	6
Seychelles	3			Malta	6	Saint Kitts and Nevis	1	Palau	0
Sierra Leone	1			Monaco	4	St. Lucia	2	Papua New Guinea	2
Somalia	6			Netherlands	0	St Vincent	2	Samoa	1
Republic of South Africa	85			Norway	57	Suriname	1	Solomon Islands	0
Sudan	4			Portugal	14	Trinidad and Tobago	2	Tonga	0
Swaziland	4			San Marino	21	Uruguay	10	Tuvalu	0
Tanzania	15			Spain	0	Venezuela	17	Vanuatu	0
Togo	4			Sweden	55	Turks and Caicos Islands	17	Total	39
Uganda	27			Swiss	66	Virgin Islands (US)	0		
Zambia	9			United Kingdom	286	Total	722		
Zimbabwe	24			Vatican City	1				
Total	550			Total	1,258			**World Total**	**6,545**

Source: McGann (2012).

4. Think Tank Establishment Trend by Period

[Figure A-1] shows the think tank establishment trend by decades. According to this data, the establishment of think tanks rapidly increased after World War II and reached its peak during the 1990s. McGann (2012) mentions the reasons for the rapid increase of think tanks after the mid-20th century as follows. First of all, the monopoly of information by the government has been greatly weakened due to the development of information and science technology, and the society has become more complex. Therefore, the policy itself has become extremely complex and technological. The policy research demand increased, followed by an increase in the number of think tanks induced by the expansion of the government's size, as well as the problem of a lack of credibility of the government and elected government officials. Moreover, growth of government and non-government political actors due to globalization, and the increase of demand that needs appropriate information and analyses at the right time also lead to an increase in the supply of think tanks.

Figure A-1 | The Number of Establishment of Think Tanks all over the World, 1900~2007



Note: The total number of think tanks established from 1900 to 2007 are 4,348.
Source: McGann (2012).

While the establishment of think tanks has gone through a worldwide decline during the past decade, McGann (2012) mentions the following factors. First of all, most governments in the world are now against think tanks or Non-Government Organizations (NGOs) due to the political and regulatory environment. Also, public/private funding through donations for think tanks have decreased. While these fund providers used to give funds for a specific idea or a specific institution, now they tend to support a specific short-term project-related research. Meanwhile, some other think tanks are merely unable to adapt to the change due to a lack of ability. There also exist numerous competitors of think tanks such as institutions that support a certain group or an ideology, consulting firms or law firms that seek revenue, and online media. Therefore, the exclusive demand for think tanks has decreased. Lastly, there were institutions that terminated their operation because they reached the purpose of their existence. In conclusion, due to a complex combination of all the reasons mentioned above, the decline of establishing think tanks occurred.

5. Recent Trend of Think Tanks

1) The Background of Think Tanks Activities

While almost half of the think tanks worldwide are concentrated in the US and in Western Europe, currently there is a tendency in other regions for think tanks to be actively operated. McGann (2012) mentions various factors for this tendency. The following is the reorganized explanation by categories according to similarities of subjects.

First is the growth of a knowledge-based economy due to globalization and technological development. The development of information telecommunication technology resulted in making knowledge a globalized good, which enabled it to freely cross borders without any physical obstacles. This led to the growth of a knowledge-based economy, and all of the knowledge-based institutions of the world started to compete against each other to obtain the most outstanding idea and the best qualified human resources. In addition, due to technological development, executing a better quality research in a shorter amount of time has become possible with a lower cost. Accordingly, a small group of people or institutions started to emerge and were able to easily present their research outcomes. Also, the most noticeable factor was the development of the Internet, which plays a crucial role.

The second factor is the decentralization of political power due to the development of democracy and the growth of NGOs. Due to the worldwide development of democracy, the social demand for an independent analysis on public policies has increased, which led to an increase demand for non-government think tank establishments. The proliferation of non-government players' activities such as the NGO due to the development of democracy increased and this naturally resulted in the increase of supply and demand of think tanks. Over the past several decades, the monopoly and control over information by the government has rapidly weakened due to the development of democracy. This tendency also enabled the independent provision of information and analyses, resulting in knowledge-based organizations such as think tanks. Meanwhile, according to the democratization trend, open debates on the government's policy decisions have become possible. Different from the past, interest groups and the public now do not accept unquestioningly the monopolistic decisions of the government, and therefore the demand for an independent analysis apart from the government grew. The emergence of the global policy network, which shares a preference for a certain policy, also took its role in enhancing the power and influence of organizations such as think tanks.

Third, the policy issue itself has become more complicated compared to the past, and there is a global tendency of restructuring and structural change. While the economy and the society became more complex compared to how it has been in the past, policy decisions has become extremely complex and technological. Accordingly, the need for highly professional advice outside the government has become dire. Followed by the development of institutional democracy, the government now faces a burden to produce a good outcome considering the elections. This also acts as a reason for the increase in demand. The structural adjustment recently occurring all over the world is also creating an increase in demand for think tanks. In general, while the developed countries are suffering from depression, on the other hand, the developing countries are achieving economic growth to a great extent. Environmental change such as the stagnation of economic growth and economic crisis of developed countries, along with fierce competition with developing countries all act as a strong incentive for politicians of developed countries who wish to be re-elected to pursue a policy with great value. Accordingly, the demand for think tanks was created. Compared to the past, the scope of the government itself has expanded, increasing the number and scope of policies that should be decided by the government. These all account for the demand creation for think tanks.

2) Recently Emerging Issues and Their Trend

McGann (2012) introduces the issues or trends related to think tanks, which used to not be highlighted, however, they now need to be analyze in-depth. I will restructure a few important cases and introduce them as follows.

First, specialization trends and intensified competition, and the associated change in funding pattern need to be reviewed. It is natural that an agency with expertise in specific areas is more attractive than comprehensive field research institutions to fund providers who are seeking an answer to a specific problem. Therefore, there is a tendency for various government institutions to gradually reduce the funding support for public policy research institutes, and private firms tends to exclusively provide funds for research directly related to specific projects. This trend of seeking research expertise is directly affecting the programs, researchers, and funding sources of research institutes that perform comprehensive research, and is also deepening the competition among research institutions. The majority of newly established research institutes during the past 30 years focus on a specific issue or a field of policy research that reflects this trend. Meanwhile, other than research institutes, consulting firms or law firms that conduct policy research has emerged as new competitors of research institutes. However, this specialization trend also acts as a barrier for research institutes to perform a complicated issue, which involves research crossing the border of academic fields.

Second is the selection problem between the influence and the independence. As research institutes began to draw more attention and have their influence grow, some agencies tend to lose their own voice and independence. In order for the research institutes to maintain their credibility from the policy decision makers, as well as from the public, it is essential to maintain the delicate balance and tension between the influence and the independence.

Third, the selection between the output and the influence as a performance indicator warrants review. Historically, think tanks have focused more on the output rather than the influence as their performance indicator. This appears to be coming partially from the fact that think tanks' influence is not easily measured in an objective manner. Therefore, many institutions have mainly focused on quantitative indicators, such as the number of publications of research reports. However, fund providers are recently becoming more interested in finding out the actual influence think tanks have on public policies. Therefore, such practices emphasizing the quantitative indicators will need to be reconsidered. Meanwhile, related to this, there appears to be a tendency for think tanks with characteristics more of a comprehensive research institute with weaker partisanship to be pressured to break out from traditional discussions or conferences, forums, or seminars. This came from the trend where donors tend to prefer the programs or institutions that perform immediately or that advocates a certain policy rather than using the traditional methods. Due to this trend, the think tanks that failed to understand and adapt to the fundamental changes occurring in society fell behind, compared to the new think tanks that performed according to the market demand.

Fourth is the growing influence of the Internet, new media, and the Social Networking Service (SNS). The era of obtaining information directly as a means of power has passed. In order for information to gain power, it must be realized at the right time in an appropriate form. This tendency redefines the method of operating think tanks. These days most of think tanks have websites, and also holds online policy discussions through the Internet. While there are more and more people obtaining new information through the Internet, new media, and the SNS, think tanks now started to re-examine the methods for making, disseminating, and discussing public policy issues. They began to rethink of ways to connect to their clients and passing on their research outcomes. They especially focused on how to make their academic research outcomes be in a form that was easier to understand, to enable easier access by the public.

Fifth, there exists a tendency to put more emphasis on the marketing strategy with the relationship with others. As the number of interest groups increased and many complex policy problems had to be immediately addressed, demand for a specialized public policy think tank grew. Accordingly, the importance of marketing strategies and relations with others became very important in order to target the core clients and donors in a more efficient way. This led to a new tendency where lengthy research publications or white papers by the government were being substituted by short summarized policy reports. Meanwhile, this tendency is requiring think tanks to adapt to the change, while maintaining their integrity and the quality of the research.

Sixth is the expansion of globalization. This globalization trend partially comes from the fact that the policy issue itself expands beyond borders. Good examples are global warming, expansion of weapons of mass destruction, global epidemics, and terrorism. New think tanks handling global issues emerged,[96] and there is a new trend of think tanks strengthening their relationship with think tanks in other regions.

In general, these kinds of trends are closely related to delivering the research outcomes on important issues of the nation to core clients such as the policy makers, the press, and the public at the right time in the best approachable way. This matter was discussed at length in Chapter 3 when explaining the think tank activities of Korea. Nevertheless, the types and activities of Korean think tanks tend to differ from those of the general form. However, by observing the worldwide trend and phenomenon, there seems to be a need for Korean think tanks to inevitably consider when setting their directions for future activities.

96. The case of the Carnegie Endowment for International Peace and the International Crisis Group is an ideal example.

6. Think Tanks in the U.S.

As shown in the beginning, an overwhelmingly large number of think tanks exist in the U.S. Among 1,912 think tanks in the North America, 1,815, which accounts for almost 95%, are in the U.S. However, these think tanks have been mostly established fairly recently. The absolute majority of think tanks in the U.S., almost 90.5%, have been founded after 1951. Especially, 31% have been established during 1981~1990. Therefore, the total number of think tanks has doubled since 1980. Meanwhile, the think tanks that emerged after the 1980s mostly have specialized fields. When observed by locations, one fourth of all think tanks, around 400, are located in the capital city, Washington, D.C. This well indicates the purpose of think tanks, which is researching policies. Almost half of those are related to universities. This also shows the close relationship or cooperation between academia and school connections. Meanwhile, there is a decline in the number of newly established think tanks for the past ten years, and this roughly matches the world trend.

The United States can be called an undisputed home of the think tanks by being more active in producing both quantitative and qualitative research. Therefore, knowing the current state of think tanks in the U.S. is not only helpful for acknowledging the general factors of think tanks, but also for providing a useful implication for the discussion of the think tanks in Korea. Thus, in this section, I will reorganize and introduce the important discussions from McGann (2005).

1) Political and Philosophical Disposition

The think tanks in the U.S. can be categorized into four types according to its political and philosophical disposition as follows: conservative, libertarian, centrist, and progressive. It is quite difficult to draw a fine line among them, nonetheless, a general category will be as follows. First of all, the conservative advocates the free market economic policy and the traditional social policies. Examples are the Heritage Foundation, the American Enterprise Institute, and the Hoover Institution. Libertarian is mostly similar to the conservative, however, their priority is on the emphasis of laissez-faire criteria, and they are mostly against the role of the government in social policies. Good examples are the Cato Institute and the Reason Foundation. Centrists refuse to belong to a certain political party, and its approach is compromising with both the conservative and the progressive. The NBER and the Institute for International Economics are such examples. Meanwhile, among the centrists, some are categorized as being center-right, such as the RAND Corporation – while some others such as the Brookings Institution or the Carter Center are considered as center-left. Lastly, the progressives support the interference of the government on economic policies, however, they argue that the government should reduce its intervention in social policies. Examples are the Justice Policy Institute and the Economic Policy Institute.

2) Formation of the Organization and the Human Resource

Large-scale research institutes in the U.S. normally have a president or a CEO. These representatives are the highest person in that organization, which takes care of the overall operation and running of the think tank. In most cases, they also are responsible for the board of directors. When observing the human resources for these research institutes, while it is quite difficult to categorize the researchers using a precise standard, normally they can be categorized as full-time researchers who are full-time employees, and part-time researchers. Full-time researchers are affiliated with the think tank, which have their own offices within the research institutes. They normally have a fixed contract period, and are able to renew the contract. On the other hand, part-time researchers tend to work irregular hours or tend to have another major place of employment (usually universities) and are involved in activities in the research institutes. Invited researchers or visiting researchers may also work in the research institutes. The <Table A-4> below indicates the top 14 think tanks' number of researchers and their budget size.

Table A-4 | Number of Researchers and Budget Size of Top 14 Think Tanks in the U.S. (2001)

Name of Think Tanks	Number of Researchers	Budget (USD)
American Enterprise Institute	Full-time 58, Visiting 15	16,300,994
Brookings Institute	Full-time 98, Concurrent Position 173, Visiting 48	30,227,800
Carnegie Endowment for International Peace (CEIP)	Full-time 48, Visiting 4	20,092,833
Cato Institute	Full-time 37, Concurrent Position 31	14,045,306
Center for Strategic and International Studies (CSIS)	Full-time 94, Concurrent Position 54	16,775,453
Council on Foreign Relations	Full-time 65, Concurrent Position 100, Visiting 20	25,720,500
Heritage Foundation	Full-time 45, Concurrent Position 43, Visiting 5	33,481,921
Hoover Institution	Full-time 80, Concurrent Position 30, Visiting 50	28,400,000

Name of Think Tanks	Number of Researchers	Budget (USD)
Hudson Institute	Full-time 50, Concurrent Position 40	7,110,011
Institute for International Economics	Full-time 18	6,0605,77
National Bureau of Economic Research (NBER)	Concurrent Position 500	23,844,357
Progressive Policy Institute	Full-time 18, Concurrent Position 18	2,740,000
RAND Corporation	Full-time 640, Concurrent Position 460	169,046,925
Urban Institute	Full-time 263	64,490,821

Source: McGann (2005).

These research topics are allocated according to the researcher's major field of study. The independence given to the researchers may differ by the structure of the institution or its culture. Institutions with an academic aim guarantee almost full independence to the researcher on a research topic and having priority on the research topics, just like a university. However, think tanks with a characteristic similar to a consulting firm or an advocacy group may control the topics their researchers may choose.

The research outcomes may either follow a personal independent report format. However, a collaboration among researchers from various fields of study is more common. In some cases, many different think tanks may even collaborate to produce a research outcome.[97]

3) Marketing, Advertising, and Participation by the Public

The fundamental role of think tanks is to create policy related knowledge and to spread that information to the government, as well as to the elites in many different areas and to the public. Therefore, it is very important to expand the research outcomes in the most efficient way. Think tanks may use the press or contact the public directly through various programs to spread their research results, and sometimes they may even hire marketing and advertising professionals. The general channels for research outcome expansion are as follows.

The first method is by seminars, conferences, and briefings. Think tanks connect with their target clients through lectures, seminars, conferences, experts meetings, and briefings. It is known that, the Center for Strategic and International Studies (CSIS) holds approximately 700 events annually, and the American Enterprise Institute (AEI) holds approximately 200 annual events.

97. Also for the case of Korea, there exist cases where many think tanks collaborate to conduct research of a large scope. This occurs mainly through a collaboration between the research institutes that belong to the National Research Council for Economics, Humanities and Social Sciences (NRCS).

Second is the expansion by publications. Publications may include the traditional methods, as well as multimedia or online publications. For the case of traditional methods of publications, major think tanks' general type of reports and research results are published, as well as the top tier journals worldwide. These world-class journals tend to be published periodically, and act as a channel for scholars to network with each other.[98] Meanwhile, many think tanks also provide prompt analyses on many issues in the form of policy briefs or newsletters.[99] Considering the development of IT technologies and increasing usage of the internet, think tanks are now utilizing the Internet webpage to its fullest for spreading out their research outcomes. Most of their publications are accessible online by downloading the files. Also, major events' schedules are also posted online on their webpage. In addition, individual researcher's contact information is open to the public, enabling easy access to that specific individual researcher outside the think tank when in need.

Third, is the delivery through the mass media. Reporters need to gain knowledge and analyses on many policy issues in order to write articles. For think tanks, these mass media may become a very efficient vehicle for presenting their research outcomes. As there exists the power of both the supply and demand, the mass media is a good channel for distributing research outcomes of think tanks. The researcher at the think tank not only provides indirectly and passively the professional knowledge needed for the reporters to write news articles, but also directly and actively express their ideas by writing a series for a fixed column with their names indicated as the writer. Also, they sometimes go on TV or a on the radio to express their opinion.

Fourth is by the connection with the government. The main role of think tanks is to conduct research related to policies. Therefore, they are very interested in maintaining the interaction channel with the government. The government mentioned here includes the legislative, the judiciary, and the administrative government offices. Think tanks strive to form and maintain their network with the government by having the experts in the think tank regularly offer a statement utilizing their professional knowledge, or by inviting a member from the relevant government office to listen to their explanation on a specific policy.

98. Also for Korea, some major government funded think tanks publish journals. For example, the Korea Development Institute (KDI) publishes the KDI Journal of Economic Policy as the registered journal of the National Research Foundation of Korea.

99. This is also applicable for Korea. For example, the KDI provides an email-based newsletter service called the 'KDI Brief.'

4) Measuring the Influence of Think Tanks

It is not an easy task to measure the influence of think tanks because, first of all, influence is not precisely defined. Even if influence has been defined, as numerous people are involved in the policy formation process, it is extremely difficult to measure the exact level of influence. Despite these difficulties, normally, the indices mentioned related to the influence of think tanks are as follows: the resource indicator, the demand indicator, and the impact indicator.

The resource indictor shows the quality and level of the resources the think tanks possesses. This includes the level and quantity of financial support, stability, accessibility to the policy decision makers or policy elites, background and technical skills of the researchers, policy and academic community, and credibility of the network with the mass media. The demand indicator shows the demand for the think tank's research activity. The frequency of mass media exposure, the number of webpage visits, the number of sold copies of publications, the number of conferences, briefings and seminars, and the demand for consultation from the government. Lastly, the impact indicator shows the influence of the research outcome by the think tanks. This includes the number of suggestions selected by the policy decision makers, the awareness by the clients, role as a supervisor for a political party or a candidate, the number of citations of their research outcomes, and the number of awards received.

In spite of the existence of these indicators, it is still very difficult to measure the direct influence of think tanks on policy formation, change, or execution. This is because, as the policy formation process is lengthy and complicated with many different persons involved, it is very difficult to argue the causality of a specific policy and the think tank. Due to these limitations, sometimes it is even possible to depend on an anecdote, evidence for the situation, or the testimony of the policy decision maker.

The Think Tanks and Civil Societies Program of the University of Pennsylvania announces the annual world ranking of think tanks all over the world based on their spheres of influence. The top 20 institutes among the think tanks in the U.S. of 2013 listed in McGann (2014) are listed in the following <Table A-5>.

Table A-5 | Rankings of the Think Tanks in the U.S. in 2013

Rank	Name of Institution
1	Brookings Institution
2	Carnegie Endowment for International Peace
3	Center for Strategic and International Studies
4	RAND Corporation
5	Council on Foreign Relations (CFR)
6	Woodrow Wilson International Center for Scholars
7	Pew Research Center
8	Heritage Foundation
9	Cato Institute
10	Center for American Progress (CAP)
11	American Enterprise Institute for Public Policy Research (AEI)
12	National Bureau of Economic Research (NBER)
13	Peterson Institute for International Economics
14	Center for a New American Security (CNAS)
15	World Resource Institute (WRI)
16	Atlantic Council of the United States
17	United States Institute of Peace (USIP)
18	Carnegie Council for Ethics in International Affairs
19	Hoover Institute
20	James A. Baker Ⅲ Institute for Public Policy

Source: McGann (2014).

Six out of the world's top ten think tanks were from the U.S., and nine out of the world's top 20 as well. This shows symbolically the high status of think tanks in the U.S. <Table A-6> below shows the world's top 20 think tanks of 2013 listed in McGann (2014).

Especially, the Brookings Institution ranked number 1 even in the world ranking, thus it is recognized as the world's best think tank. As aforementioned, the Institute for Government Research (IGR), founded in 1913, was the former Brookings Institution. This research center merged with the Institute of Economics established by Robert Brookings and the Robert Brookings Graduate School in 1927, thus forming the current Brookings Institution. The Brookings Institution is well-known for its outstanding influence by having provided many policy ideas such as the New Deal Plan, Foundation of the United Nations (UN), the

Marshall Plan, and the G-20. Many democrats participated in the Brookings Institute, thus making this institute rather progressive, which is compared to the conservative Heritage Foundation.

Table A-6 | World's Top 20 Think Tanks in 2013

Rank	Name of Institution	Country
1	Brookings Institution	US
2	Chantham House	UK
3	Carnegie Endowment for International Peace	US
4	Center for Strategic and International Studies	US
5	Stockholm International Peach Research Institute (SIPRI)	Sweden
6	Brugel	Belgium
7	Council on Foreign Relations (CFR)	US
8	RAND Corporation	US
9	International Institute for Strategic Studies (IISS)	UK
10	Woodrow Wilson International Center for Scholars	US
11	Amnesty International	UK
12	Transparency International	UK
13	Japan Institute of International Affairs (JIIA)	Japan
14	German Institute for International and Security Affairs (SWP)	Germany
15	Peterson Institute for International Economics	US
16	International Crisis Group (ICG)	Belgium
17	Heritage Foundation	US
18	Cato Institute	US
19	European Council on Foreign Relations (ECFR)	UK
20	Chinese Academy of Social Sciences (CASS)	China

Source: McGann (2013).

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