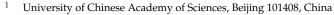


Article Academic Pursuits and Involvement in Decision-Making: Study on the Formation of U.S. University Think Tanks

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Abstract: This paper analyzes the concept of think tanks and concludes that think tanks have three basic characteristics. Firstly, they are based on academic research, relatively independent operation, and aim to serve scientific decision-making. Taking Ivy League think tanks as an example, this paper provides a preliminary discussion of ways for think tanks to maintain the scientific nature of their research, maintain the independence of their operations, and disseminate research results to enhance their influence. It covers institutional mission, research team construction, institutional governance, fundraising, achievements and activities, and alumni networks. This paper proposes a framework of university think tank generation paths associated with the essential characteristics of think tanks. The paper points out that, as a research consulting organization grown out of universities, university think tanks must maintain the scientific nature and independence of research while providing support and services for decision-making. Only in this way can they truly serve scientific and democratic decision-making, gain the trust of the public and have a real lasting influence.

Keywords: American university affiliated think tank; decision-making; think tank operation mechanism; characteristics of think tank; the ivy league university

1. Introduction

Think tanks are research and consulting institutions that use objective and neutral scientific research to influence policy and thus advance the country and society. There are well over 1500 think tanks or political research centers in the US, around half of which are university affiliated institutions and approximately one-third of which are located in Washington, DC. (McGann 2007). The appellation "think tanks" that we usually call now originate in the United States and flourished in the United States. It is an Anglo-American term that is not transported easily into other political cultures (Stone 2000). Think tanks are an overwhelmingly American phenomenon (Dickson 1971). In the United States, although the term "think tank" had not yet been invented around 1900, public policy research institutions began to emerge at that time, embodying the requirements of the Progressive Era, providing professional insights from scholars and scientists to solve a wide range of public policy issues that suddenly appeared during that period (McGann and Sabbatini 2010). Carnegie Endowment for International Peace and Brookings Institution were established during the early twentieth century. The term "think tank" was first used in the 1960s during the Cold War to refer to the RAND Corporation and other similar civil-military research groups (Dickson 1971). At that time, the U.S. government began to pay attention to the comprehensive research results produced by the combination of engineers, physicists, biologists and sociologists, and government-contracted think tanks have developed greatly (Wang and Miao 2014). Since the 1970s, increasingly think tanks in the United States have had distinct partisan tendencies and ideology, trying to promote



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Copyright: © 2023 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https:// creativecommons.org/licenses/by/ 4.0/). political views to policy makers to influence decision-making. Such think tanks, such as the Heritage Foundation or the Center for American Progress, organize research programs to support ideological or partisan agendas, and increasingly blur the line between scholarship and advocacy (Chance 2016).

Existing scholars have given various definitions of think tanks from different perspectives. Some consider think tanks to be institutions based on academic research. For example, to David Boorstin, a think tank is a special research and development institution designed as a synthesizer of academic, scientific, and technical tools for decision-makers to combine "technical know-how" and "expertise" (McGann et al. 2014). Some scholars acknowledge that think tanks have an ideological stance, but think tanks rely on their research capabilities rather than lobbying to influence policy. For example, Hartwig Pautz (2012) points out that think tanks are formal nongovernmental organizations that engage in intellectual activities, are financially independent from government, political parties and interest groups, aim to influence policy; think tanks claim political neutrality but often do not hide their ideological positions; some think tanks are strong in research and some are weak, but they all change policy not through behind-the-scenes lobbying, but through debate on ideas and thoughts. Some other American think tank experts, such as Jone Solama, William Domhoff, and Thomas Dye, believe that think tanks are organizations that serve the economic and political interests of big business and big corporations; some scholars even believe that think tanks are controlling organizations created by Washington that include government, business, and academia (Chu 2013).

Think tanks in many countries have made great contributions to strategic decisionmaking. Weidenbaum (2010) noted that think tanks are an important source of information for the media, government, and the many interest groups involved in the public policy process. The 2012 book "Think Tanks in America" by Thomas Medvetz gives a critical history and critique of think tanks in the United States. The book investigates the role of think tanks in American politics, including their impact on presidential administrations, Capitol Hill, and the media. According to Medvetz, the ambiguity surrounding think tanks is what makes them so influential. Think tanks integrate components of well-established public information sources, such as universities, government organizations, companies, and the media, to influence how individuals and lawmakers perceive the world (Medvetz 2012). David Shambaugh's essay "China's International Relations Think Tanks: Shifting Structure and Process" examines the increasing importance of China's international relations (IR) think tanks in foreign policy formation and intelligence analysis. This article examines the structure and operations of these think tanks over the past two decades and argues that they have become crucial for Chinese policymakers in understanding international events and formulating foreign policy. It provides a useful overview of the evolving role of China's IR think tanks and sheds light on how these think tanks influence China's foreign policy (Shambaugh 2002).

However, over the past decade, the U.S. think tank industry has been repeatedly criticized by the mainstream media (Lipton et al. 2016; Medvetz 2014) and the ideological trend has greatly reduced the credibility and contribution of U.S. think tanks.

We wonder, what kind of organization should a think tank be? An institution that improves policy and advances the country and society through objective and neutral social science research as it was in its early days, or an organization mixed with political partisan and interest group considerations? The existing studies do not give us satisfactory answers.

As we know, among all kinds of think tanks in the United States, the number of university affiliated think tanks is huge, and nowadays, many academic research institutions or universities with deep academic backgrounds are transforming into think tanks or establishing think tanks by combining their disciplinary strengths. University affiliated think tanks can serve as a good perspective for understanding and studying think tanks. However, the existing research works on think tanks are less common for university affiliated think tanks. For example, the authors (Wang and Miao 2014) have conducted in-depth research on well-known think tanks in the book " Think tank of the great nation", such

as the RAND Corporation, Brookings, the Cato Institute, the Heritage Foundation, the Carnegie Endowment for International Peace, the Center for American Progress, Council on Foreign Relations, Center for Strategic and International Studies, the Peterson Institute for International Economics, and the American Enterprise Association, but rarely choose to research university think tanks. As another example, when the book "How think tanks shape social development policies" (McGann et al. 2014) discussed how think tanks shape social development policies at the national, regional and global levels, it did not choose university think tanks, but were usually on a specific institution, and no study has been conducted on a representative group of university think tanks. The formation mode and generation path of excellent university think tanks has not been fully explored.

This paper hopes to make up for the gaps in existing research through the exploration of the origin, basic characteristics of think tanks and the operation mode of university think tanks. First, in the face of the current mixed world of think tanks, this paper clarifies what kind of institutions can be called think tanks, what qualities true think tanks have by combining literature research, and put forward the research subjects around the qualities of think tanks. Then, it selects appropriate analytical variables to conduct empirical research; the framework diagram of university think tank generation path and formation mode presents research findings and answers the research questions raised in this paper. To make this study more representative, this article takes think tanks held by universities with high reputation—the Ivy League University Think Tanks—as research cases. The contribution of this paper is that it attempts to answer the question of how think tanks can find a balance between academic pursuit and decision-making participation, which can provide reference for those institutions that wish to transform into think tanks. At the same time, it will help the public understand what a real think tank is, distinguish which research results are more objective and credible from the dizzying reports released by various consulting agencies, and have a more rational judgment and understanding of various hot issues currently faced.

2. Literature Review

2.1. Overview of Think Tanks

Many scholars have defined think tanks from various perspectives, but the characteristics of whether they are private, independent, non-profit, nonpartisan, and so on, remain controversial.

Therefore, the only consensus in the literature on the definition of a think tank is that there is no consensus. However, we can summarize the most basic characteristics of think tanks by sorting out the related works and literature of think tanks.

In 1971, Paul Dickson (1971) published "Think Tank", which is an early monograph devoted to think tanks. He defined think tanks as follows:

"... A think tank can be profit or nonprofit; A think tank must, however, be a permanent entity as opposed to a study commission or special group with a temporary assignment.

... The primary function of a think tank as the term is used here is to act as a bridge between knowledge and power and between science/technology and policy-making in areas of broad interest. A currently popular term for this role is "policy research" or research that produces ideas, analysis, and alternatives relevant to people who make policy.

... A think tank has several general characteristics. It is oriented to scientific methodologies, such as operations research, but is by no means limited to scientific issues. Because of the nature of the problems it faces and the techniques it employs, a think tank is invariably multidisciplinary—that is, it is seldom limited to professionals from one field while working on any given project and will

almost always use a team of experts from a number of fields on large long-range projects."

A modified version of Dickson's 1972 definition (Mcgann 2019) is as follows: From a global perspective, a think tank can be for-profit or non-profit; supported by the government, part of the government, completely free of the government, or supported by a number of institutions, such as a company or university; and, finally, must practice relative academic freedom.

Harold Orans innovatively introduced the concept of "independence" in 1972, proposing that think tanks are independent, usually separate, non-awarding organizations that focus most of their annual spending on the development of new technologies and research in natural and social sciences, engineering, humanities and expertise (Mcgann 2019).

In the United States, think tanks are roughly divided into three types: academic, contractual, and advocacy think tanks (including political parties), according to their different intentions, sources of funding and research principles. Although the two types of think tanks, academic and contract, differ greatly in terms of funding sources, theme setting and output, they both tend to recruit staff with high academic attainment, attach importance to rigorous scientific methods and emphasize objective analysis by science more than by politics. On the other hand, advocacy think tanks tend not to conduct original research, but to synthesize existing research and combine partisan or ideological leanings with salesmanship to influence current policy debates in order to extract resources from specific interest groups (McGann and Sabbatini 2010). Such think tanks lack independence and objectivity, and only help their own interest groups or political parties to achieve political goals.

The United States has seen the emergence of a large number of highly Ideological political advocacy think tanks since the 1970s, so much so that the interests behind their initiatives and public policy making often raise questions about whether the "image of science" and "intellectual authority" touted by think tanks still exist (McGann et al. 2014).

In spite of this, scholars who have studied the think tanks in the past 40 years still emphasize that the core competence of the think tank is its professional knowledge ability, independent research ability, and the decision-making influence based on this.

For example, R. Kent Weaver (1989) believes that the think tank industry in the United States is a non-profit public policy research industry. Richard N. Haass (2002) sees think tanks as organizing independent institutions that conduct research and generate independent knowledge related to policy. Diane Stone (2000) noted that think tanks usually engage in policy-oriented, time-sensitive research, seek to connect with policy groups, inject new ideas into policy debate, and try to influence policy through intellectual debate and analysis rather than direct lobbying, and think tanks try to create academic theories and scientific paradigms related to policy. Andrew Rich (2005) believes that think tanks mainly rely on their expertise and ideas to influence the decision-making process. Think tanks are independent and non-profit organizations. In order to gain credibility, think tanks seek maximum independence. They try to make the public believe that they are independent of interest groups. In his work, Ruser (2018) analyzes the growing significance of expert counsel and scientific information in societies with sophisticated levels of knowledge, especially when political decision-makers face increasingly complicated global concerns. Mcgann (2019) provides a comprehensive overview of what constitutes a think tank in the "Global Go to Think Tank Index Report" (University of Pennsylvania Think Tank Project (TTCSP)): "Think tanks are public-policy research analysis and engagement organizations that generate policy-oriented research, analysis, and advice on domestic and international issues, thereby enabling policy makers and the public to make informed decisions about public policy. Think tanks may be affiliated or independent institutions that are structured as permanent bodies, not ad hoc commissions. These institutions often act as a bridge between the academic and policymaking communities and between states and civil society, serving in the public interest as an independent voice that translates applied and basic research into a language that is understandable, reliable, and accessible for policy makers

and the public.... The university affiliated think tanks involve student research through research fellowships and internships as well as undergraduate and graduate programs".

The views of scholars outside the United States on the nature of think tanks similarly emphasize aspects, such as their academic-based nature and research independence. Take the example of representative Chinese scholars engaged in think tank research. Xue and Zhu (2006) believe that think tanks are relatively stable and independently operating policy research and consulting institutions and consider that "think tanks should at least have independent operational authority", "there is no necessary causal relationship between the acceptance of contract research and the neutrality of the think tank's views" and "in China, strict regulations on the nonprofit nature of think tanks are unnecessary for think tank research". According to Lili Wang (2013), a new type of think tank with Chinese characteristics is a research institution that adheres to an independent, objective, and factual research attitude in the political, economic and cultural soil of China, takes policy research and strategic research as its mission, is oriented to serve the national interest and public interest, and is not profit-oriented.

From the above definition, it is evident that think tanks are research institutions with the purpose of providing ideas and solutions for policy making, based on academic research, and composed of teams of experts in multiple fields. Think tanks invest a lot in scientific research, which relies on interdisciplinary and multi-field expert cooperation, and relies on scientific theories and methods. Table 1 summarizes the main arguments of scholars on the meaning of think tanks.

Scholars	Perspectives on Think Tanks
Paul Dickson (1971)	The primary function of a think tank as the term is used here is to act as a bridge between knowledge and power and between science/technology and policy making in areas of broad interest. A currently popular term for this role is "policy research" or research that produces ideas, analysis, and alternatives relevant to people who make policy.
Paul Dickson (Mcgann 2019)	From a global perspective, a think tank can be for-profit or non-profit; supported by the government, part of the government, completely free of the government, or supported by a number of institutions, such as a company or university; and, finally, must practice relative academic freedom.
Harold Orans (Mcgann 2019)	Think tanks are independent, usually separate non-awarding organizations that focus most of their annual spending on the development of new technologies and research in natural and social sciences, engineering, humanities, and expertise.
R. Kent Weaver (1989)	The think tank industry in the United States is a non-profit public policy research industry.
Diane Stone (2000)	Think tanks usually engage in policy-oriented, time-sensitive research, seek to contact with policy groups, inject new ideas into policy debate, and try to influence policy through intellectual debate and analysis rather than direct lobbying, and think tanks try to create academic theories and scientific paradigms related to policy.
Richard N. Haass (2002)	Think tanks as organizing independent institutions that conduct research and generate independent knowledge related to policy.
Andrew Rich (2005)	Think tanks mainly rely on their expertise and ideas to influence the decision-making process. Think tanks are independent and non-profit organizations. In order to gain credibility, think tanks seek maximum independence. They try to make the public believe that they are independent of interest groups.
Xue and Zhu (2006)	Think tanks are relatively stable and independently operating policy research and consulting institutions.
Lili Wang (2013)	A new type of think tank with Chinese characteristics is a research institution that adheres to an independent, objective and factual research attitude in the political, economic and cultural soil of China, takes policy research and strategic research as its mission, is oriented to serve the national interest and public interest, and is not profit-oriented.
Ruser (2018)	In societies with complex levels of knowledge, expert advice and scientific information are increasingly important, especially when political decision-makers are faced with increasingly complex global issues.

Table 1. Main views of important scholars on think tanks.

Table 1. Cont.

Scholars	Perspectives on Think Tanks
James Mcgann (2019)	Think tanks are public-policy research analysis and engagement organizations that generate policy-oriented research, analysis, and advice on domestic and international issues, thereby enabling policy makers and the public to make informed decisions about public policy. These institutions often ac as a bridge between the academic and policymaking communities and between states and civil society serving in the public interest as an independent voice that translates applied and basic research into a language that is understandable, reliable, and accessible for policy makers and the public.

Some "think tanks" that only advocate and lobby cannot be regarded as think tanks in the original sense. Such organizations are better known as "lobbies" or "interest groups". An academic research institution can be called a think tank if it takes advantage of its academic strengths in its field of expertise to conduct independent research on strategic issues and public policies oriented to real-world problems. Think tanks that are built on the strengths of a university's superior disciplines have a think tank function that is naturally formed by the cultivation of academic research soil.

2.2. Characteristics of Think Tanks

Based on the aforementioned definitions of the notion of think tanks by academics, we have observed that think tanks generally exhibit the three characteristics listed below. First, think tanks are based on academic research.

As a bridge between knowledge and power and between science/technology and policy making, think tanks study specific problems in real society, the "real" problems in the real world that are constantly available for academic research. Academic research continues to propose new solutions and innovative theories in solving practical problems, effectively solving real-world problems while also promoting the growth of related disciplinary fields. Think tanks need to form policy making recommendations in in-depth academic research and identify academic issues in specialized policy making advice and services (Liu 2018). As the problems faced by think tanks are comprehensive and interdisciplinary, think tanks need to have the research and organizational ability to deal with multi-field, comprehensive and complex problems.

The "revolving door" mechanism makes it easier for scholars who have the opportunity to move between universities, think tanks, and government to become the research experts that think tanks need. For example, Joseph Nye, dean of the Kennedy School of Government at Harvard University, first introduced the concept of soft power in 1990 in an article entitled "Soft Power" published in the journal *Foreign Policy*. Soft power subsequently became a moniker used with great frequency in the post-Cold War era. Joseph Nye served as Assistant Secretary of State in the Carter Administration and as Chairman of the National Intelligence Council, and Assistant Secretary of Defense in the Clinton Administration before returning to Harvard.

Second, think tanks operate with relative independence.

It is certainly important for think tanks to understand the decision-makers they are trying to influence, and to transmit their findings to decision-makers by establishing smooth communication mechanisms. However, they cannot be the spokesperson of policy makers or of a certain interest group, otherwise, the loss of independence of think tanks will lead to the lack of scientific and objective research results and betray the public interest. In order to better serve scientific, democratic and law-based decision-making, it is most appropriate for think tanks to maintain an independent relationship with decisionmaking institutions, that is, a "detached" relationship, so as not to lose the basic principle of objective research while serving for decision-making. When asked how think tanks maintain their independence when they receive government-commissioned projects and are funded by the government, Raymond J. Struyk replied": The terms of a contract are critical for think tanks' independence. Two terms were especially important. One fundamental term was that the government could not demand changes to policy recommendations in final reports. Of course, the officials overseeing the contracts had the opportunity to provide comments on reports. If their comment had merit, the contractor would want to make the suggested change; that is fine, but they could not demand them except on narrow technical points. The second key term was the contractor has right to publish the final report. Even if the government did not like it or did not give the contractor comments, after 60 days, the contractor still had the right to publish the report." (Lyu and Luan 2017).

It is worth noting that some research and consulting institutions are part of the government. If they carry out research only to serve the organization, they should not be considered as think tanks in the strict sense.

Third, think tanks aim to influence decision-making.

Think tanks carry out practical research with the main goal of having an impact on public policy making and decision-making. Richard N. Haass (2002) identifies five different ways that U.S. think tanks influence U.S. foreign policy makers: provide original ideas and alternatives for policy; provide the government with a ready pool of experts for employment; provide a venue for high-level discussion; educate American citizens by providing information about the world at large; help authorities mediate and resolve conflicts. According to Jiaofeng Pan (Lyu 2016), high-end think tanks play an important role in the following four areas: first, to carry out research on major issues, and put forward advisory reports on issues of concern to the government; second, to consult and comment on reform programs and policy measures, and to conduct third-party evaluations before the introduction of policy measures; third, to evaluate the implementation of major decision-making programs and policy measures; and fourth, to conduct forward-looking and reserve research.

However, in pursuit of "influence", many think tanks tend to unilaterally emphasize "influence" in decision-making, thus deviating from objectivity. Some institutions do not help governments formulate policy through a wealth of comprehensive and objective data and expertise, nor do they engage in truly innovative policy research, but rather take a position first and cobble together a product that fits their preferences and ideology. Such an institution is not suitable to be called a think tank, and its influence will not be truly sustainable. In fact, scientific, reliable, and independent research results are the basis of a think tank's influence, and then the relationship network of think tanks is used to achieve "influence".

These three basic characteristics of think tanks addressed above can be summarized in Table 2 and can be linked in Figure 1.

Essential Features of Think Tanks	Representative Scholars that Faced Them
1. Based on academic research.	Think tanks need to form policy-making recommendations in in-depth academic research and identify academic issues in specialized policy-making advice and services. –Xiwen Liu (2018)
2. Operate with relative independence.	The government could not demand changes to policy recommendations in final reports. The second key term was the contractor has right to publish the final report. —Raymond J. Struyk (Lyu and Luan 2017)
3. Aim to influence decision-making.	Provide original ideas and alternatives for policy; Provide the Government with a ready pool of experts for employment; Provide a venue for high-level discussion; Educate American citizens by providing information about the world at large; Help authorities mediate and resolve conflicts.
	–Richard N. Haass (2002)
	Carry out research on major issues and put forward advisory reports on issues of concern to the government; Consult and comment on reform programs and policy measures and to conduct third-party evaluations before the introduction of policy measures; Evaluate the implementation of major decision-making programs and policy measures; Do forward-looking and reserve research.
	–Jiaofeng Pan (Lyu 2016)

Table 2. The main characteristics of think tanks.

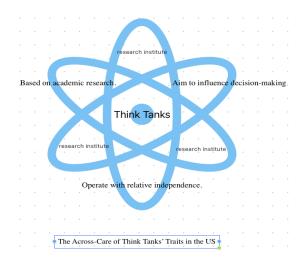


Figure 1. The across-care of think tanks in the US.

These think tanks' characteristics exist on the same grounds, offering a need for crosscare connection, since they pursue the primary purpose of resolving problems that many research institutes may encounter. Figure 1 demonstrates the similar characteristics of the relationship.

As we have seen, complexity goes much beyond the fact that many so-called think tanks that promote for their own interests develop products that appear to be as "scientific and impartial" as the research findings of independent think tanks. Without a long-term examination of their ideological bent, financing sources, board members, etc., it is difficult to determine the genuine nature of these think tanks. Moreover, when these think tanks give society an unfavorable impression, the image of the think tank community as a whole is distorted.

Therefore, some powerful and influential think tanks do not even want to be advertised as "think tanks". This reflects the uneven quality of various think tanks and the scarcity of truly credible think tanks. For example, the RAND Corporation clearly points out on its website that it is different from the commonly thought of "think tank is an organization with a specific political or ideological agenda". This also reflects the scarcity of think tanks based on fact and evidence-based research. Based on our observations of the traits of think tanks shown in Table 2 in relation to the research questions, the researchers' interests have been revealed to center on the subject data of the study, which focuses on the operational experience of university think tanks in: How do university think tanks maintain the academic, intellectual, and professional nature of their research? How do university think tanks maintain objectivity, autonomy, and independence? How do university think tanks disseminate ideas and policy research products to influence decision-making? By answering these questions, this study expects to fill the gap in the current research on the operation mode and development path of university think tanks.

3. Research Methodology

Concerning distinct situations from the Ivy academic organizations, the cross-care comparison approach is likewise applied. "Case Study Research: Design and Methods", created by Yin, is a thorough handbook on completing case studies, including single-case designs, multiple-case designs, and comparative case studies (Yin 2009). In contrast, Eisenhardt's multi-case theory-building approach is commonly referred to as "The Eisenhardt Method" (Volmar and Eisenhardt 2020). These authors provide valuable insights on case study analysis, which the researchers of this study utilized for purposes of comparing care across institutions.

A university think tank is a research and consulting institution founded by a university and focusing on public policies. The housing of the think tank is often located on the campus of the respective university (McGann 2020). The university think tanks studied in this article are those founded by highly respected Ivy League universities, the Ivy League schools (including Brown University, Columbia University, Cornell University, Dartmouth College, Harvard University, Princeton University, University of Pennsylvania, Yale University) have many prestigious think tanks, whose research fields cover a wide range of topics, such as politics, economics, environment, science and technology, humanities, international relations and security. In fact, Ivy League think tanks consistently top the *Global Go to Think Tank Index Report*.

Ivy League think tanks happen to be in the eastern part of the United States, and this does not mean that the think tanks in the eastern part of the United States are more excellent of the overall think tanks in the United States. As we sense, many think tanks around DC have departed from being think tanks in the original sense, and have been reduced to advocacy-based think tanks or lobbying organizations that lack objective scientific research capabilities. The key to enhancing the influence of a think tank is not its geographical location, but whether it has a strong ability to produce ideas, research on policy countermeasures, and spread ideas. There are also very well-known think tanks in the western United States, such as the Hoover Institution, located at Stanford University, which is more influential and well-known than many Ivy League think tanks. Due to space limitations, this article only examines the operating modes of Ivy League universities.

Since we did not have the opportunity to visit the think tanks to obtain first-hand information, this paper presents a case study based on secondary data. In order to ensure the authenticity and accuracy of the sources, we choose the official websites of these think tanks to obtain the required information.

3.2. Variable Selection

Combined with data matching and availability, this study selects six variables of institutional mission/strategy/goals, human resources, governance structure, funding sources, achievements and activities, and network resources of the Ivy think tanks to present the research results. People always choose the TTCSP (Think Tanks and Civil Societies Program) Global Go to Think Tank Index Reports as the world's most authoritative and the most comprehensive index of think tanks. The four categories of evaluation indicators devised in the TTCSP Global Go to Think Tank Index Report-resource indicators, utilization indicators, output indicators and impact indicators—have been cited by many think tank evaluation institutions today as reference standards and the basis for research (Hu et al. 2018). There are also many think tank evaluation research institutions in China that have launched think tank evaluation index systems, such as the AMI Research Report on Comprehensive Evaluation of Chinese Think Tanks launched by the Chinese Academy of Social Science (CASS 2017), and the CTTI source think tank MRPA evaluation report by the Center for Chinese Think Tank Studies and Evaluation and Think Tank Research and Release Center of Guangming Daily (CCTTSE 2016). Each of these evaluation index systems has its own advantages and disadvantages. In this paper, the indicators of these think tank evaluation systems are referred to in the selection of analytical variables.

4. Findings

4.1. How Do University Think Tanks Maintain the Academic, Intellectual, and Professional Nature of Their Research?

Think tank research is based on academic research, and many well-known think tanks have the reputation of "universities without students". In the following, this article will specifically explain the thinking and measures of university think tanks in maintaining the scientificity and specialization of research results from the aspects of the development goals of think tank institutions and the composition of research teams. Table 3 lists the establishment time, development mission, research fields of typical Ivy League think tanks (these think tanks were selected with reference to the *Global Go to Think Tank Index Report*, published annually by the Think Tanks and Civil Societies Program (TTCSP) at the University of Pennsylvania).

	Think Tank Titles	Schools and Faculty	Mission/Goals/Strategy	Year Founded	Area of Focus		
	Think tanks in Harvard University (Cambridge, MA)						
1	Ash Center for Democratic Governance and Innovation	Harvard Kennedy school (HKS)	To advances excellence and innovation in governance and public policy through research, education, and public discussion.	2003	Politics and economy Issues of governance		
2	Belfer Center for Science and International Affairs	HKS	To provide leadership in advancing policy-relevant knowledge about the most important challenges of international security and other critical issues where science, technology, environmental policy, and international affairs intersect; to prepare future generations of leaders for these arenas. Educate students and the next		International relations and security International security and diplomacy, environmental and resource issues, science, and technology policy		
3	Carr Center for Human Rights Policy	HKS	Educate students and the next generation of leaders from around the world in human rights policy and practice; convene and provide policy-relevant knowledge to international organizations, governments, policymakers, and businesses.	1999	Politics and economy Human rights policy		
4	4 Center for International HKS Development		Works across Harvard University and a global network of researchers and practitioners to build, convene, and deploy talent to address the world's most pressing challenges. Through our faculty affiliates, programs, fellows, students, and staff, we invest in growing development thinkers and doers in three ways: Build a Global Pool of Talent, Convene Academic and Practitioner Networks, Deploy Breakthrough Research.	1999	Politics and economy Problems of global poverty		
5	Mossavar-Rahmani Center for Business and Government	HKS	To advance the state of knowledge and policy analysis concerning some of society's most challenging problems at the interface of the public and private sectors.	late 1970s	Politics and economy Society's most challenging problems		

 Table 3. The representative Ivy League university think tank overview.

	Think Tank Titles	Schools and Faculty	Mission/Goals/Strategy	Year Founded	Area of Focus
6	Davis Center for Russian and Eurasian Studies	Faculty of Arts and Sciences	By fostering opportunities for innovative scholarship, creative teaching, and broad learning within a research university, we educate future leaders who make enduring contributions and bring deep knowledge to bear on contemporary problems.	1948	International relations and security Problems of the Eurasian region
7	Fairbank Center for Chinese Studies	Faculty of Arts and Sciences	To brings together a global community of world-leading academics and practitioners to advance scholarship in all fields of China Studies.	1955	International relations and security China Studies
8	8 Weatherhead Center for Faculty of Arts International Affairs and Sciences co		To facilitate the production of pathbreaking social science research on international, comparative, transnational, and global issues by faculty and students at Harvard.	1958	International relations and security International issues, domestic social, economic, and political problems
		Thin	k tanks in Columbia University (New York, NY)		
9	Center On Global Energy Policy	School of International and Public Affairs	Producing best-in-class research, providing a global platform to communicate, and training tomorrow's leaders and communicators.	2013	Environment, science, and technology Energy issues
10	10 Earth Institute -		To develop and inspire knowledge-based solutions and educate future leaders for just and prosperous societies on a healthy planet. The School will encompass the Earth Institute's research centers and programs, build on Lamont-Doherty Earth Observatory's decades of research, and involve schools and departments from across the University.	1995	Environment, science, and technology Geology, oceans, freshwater systems, climate, and atmosphere
11	Weatherhead East Asian Institute	-	To advance knowledge of East, Inner, and Southeast Asia, both across the university and among the public; to bring together faculty, research scholars, and students in an integrated program of teaching and research on East, Inner, and Southeast Asia; to train students to understand the countries, peoples, and cultures of East, Inner, and Southeast Asia, preparing them for a wide range of careers.	1949	International relations and security East, Southeast Asian

Table 3. Cont.

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Table 3. Cont.

	Think Tank Titles Schools a Faculty		Mission/Goals/Strategy	Year Founded	Area of Focus
		ks in the University of Pennsylvania (Philadelphia, PA)			
12	Center for the Advanced Study of India	School of Arts and Sciences	It is the first research institution in the United States dedicated to the study of contemporary India. A national resource, it fills an urgent need for objective knowledge of India's politics and society, rapidly changing economy, and transformation as both an ancient civilization and major contemporary power. The key goals are to nurture a new generation of scholars across disciplines and to provide a forum for dialogue among the academic, business, and foreign policy communities. Through its collaborative research initiatives, seminars, conferences, publications, and outreach, the Center provides in-depth, policy-relevant analysis of the most pressing issues facing India and the Indo-US relationship today.	1992	International relations and security South Asian studies and scholarship on India
13	Leonard Davis Institute of Health Economics	A cooperative venture	Research to improve the nation's health system. Data driven. Policy focused.	1967	Politics and economy The medical, economic, and social issues
14	Think Tanks and Civil Societies Program	Lauder Institute	To conduct research on the relationship between think tanks, politics, and public policy, produce the annual Global Go To Think Tank Index, develop capacity-building resources and programs, support a global network of close to 7000 think tanks, and train future think tank scholars and executives.	1989	Politics and economy. The role policy institutes play in governments and civil societies around the world
		nk tanks in Brown University (Providence, RI)			
15	Thomas J. Watson Institute	Watson Institute for International and Public Affairs	To promote a just and peaceful world through research, teaching, and public engagement	1981	International relations and security Poverty and inequality Natural disasters and ethnic conflict. Rapid urbanization and climate change. Globalized labor standards and cyber threats

Table 3. Cont.

	Think Tank Titles Schools and Faculty		Mission/Goals/Strategy	Year Founded	Area of Focus
		Think	c tanks in Princeton University (Princeton, NJ)		
16	Program on Science and Global Security	or a safer and more peaceful			International relations and security Nuclear, biosecurity
17	Yale Center for the Study of Globalization - Center draws on the rich intellectual resources of the Yale community, scholars from other universities, and experts from around the world.		2001	International relations and security Global development, financial globalization, multilateral trade, and the provision of key global public goods	

Notes: 1. Source: Think Tank Official Website. 2. The field to which the think tank belongs is identified by its best-known area. 3. According to the 2019 TTCSP Report, there were 17 Ivy League think tanks as listed. Although more Ivy League think tanks can be found than those listed in the TTCSP Report by searching "center" and "institute"—which are Anglo-American popular descriptions of think tanks—across the Ivy League university websites, this study only examined those in the TTCSP Report.

4.1.1. To Propose the Development Idea of Using Knowledge for Decision-Making and Serving the Public

A think tank's development philosophy can reflect the underpinnings of the institution—whether it is based on academic research or just advocacy—and can reflect what the think tank hopes to become.

To achieve the institutional goals, first of all, think tanks cannot do without the extensive and far-reaching academic influence they have accumulated over time. High-quality think tank results rely on high-level academic research. It is clear from the mission description that these think tanks are first and foremost the top research institutions in their fields, and only on this basis can these institutions fully function as think tanks. For example, the mission description of the Harvard Fairbank Center for Chinese Studies highlights their intellectual contribution to the field of study: advance scholarship in all fields of China Studies.

Second, because the problems faced by think tanks are comprehensive and complex, they often require the support of scientific theories, methods, and tools. Ivy League think tanks, backed by universities with very strong basic research, are well positioned to carry out high-level theoretical and methodological innovation. The Ivy League think tanks pay attention to take the application of theoretical methods, such as informatics, big data and knowledge mining as an important basis to support decision-making, ensuring the scientific, professional and high-quality development of think tanks. As the slogan of Leonard Davis Institute of Health Economics of Penn. shows: Research to Improve the Nation's Health System. DATA DRIVEN. POLICY FOCUSED.

Third, as a bridge between knowledge and power, think tanks conduct academic research that is oriented to real-world problems. Although university think tanks also offer a variety of degree education, they do not develop subjects in a vacuum-like educational institutions. Instead, they emphasize the application of knowledge, such as science and technology, to decision-making on major issues and to serving the public and society. As the mission of Thomas J. Watson Institute is: "To promote a just and peaceful world through

research, teaching, and public engagement". The vision of Program on Science and Global Security is: "Science, technology, and policy for a safer and more peaceful world".

4.1.2. To Establish a Compound Research Team Composed of Outstanding Talents

First-class talents are the basis for high-level think tanks to carry out research work. From the perspective of the fields involved in the research of think tanks, think tanks are often faced with complex issues involving public interests, which are closely related to society, economy, national security, and other factors. Decision-making is faced with an increasingly complex environment, and any major issue is comprehensive and important. Therefore, it is usually necessary to gather scholars from social sciences, natural sciences, management, and other disciplines, and even from different schools and political backgrounds, to ensure the objectivity and reliability of the research results of think tanks. The Ivy League think tanks are often able to efficiently mobilize global research forces to work together for think tanks. For example, the Carr Center of HKS includes leading scholars and practitioners exploring issues including artificial intelligence, corruption, migration, trafficking, and torture, ranging from diplomacy to business and social responsibility, and to technology and ethics; the Earth Institute of Columbia bring those physical scientists together with experts in economics, law, public health and policy, to address issues of global sustainability. The structural complexity of the research team enables the think tank to put forward more objective, rational, comprehensive, and more realistic research conclusions from different angles and aspects when facing decision-making problems (Lyu 2022). Researchers with a knowledge background of natural science and technical engineering can carry out scenario analysis, policy simulation, uncertainty analysis and network analysis with quantitative analysis; researchers with backgrounds in management science, humanities and social science background, can focus on the impact of science and technology on the economy, society, law, etc.

In addition, because think tanks need to face and work on complex real-world problems, including value distribution and interest coordination, think tank research usually focuses more on a combination of objective analysis and subjective judgment. At this point, government personnel with actual policy research experience or who have been involved in policy making can bring to the think tank experience in solving complex problems and help make the think tank's research results more practical and actionable. This is why think tanks often prefer to recruit former dignitaries.For example, the fellow of Fairbank Center, Barry Bloom, was a former consultant to the White House and is currently Chair of the Technical and Research Advisory Committee to the Global Programme on Malaria at the WHO. Yair Pines, George Chouliarakis, the Senior Fellow of M-R Center, was the Chairman of the Council of Economic Advisers of Greece and the Alternate Minister of Finance of Greece from August 2015 to July 2019. Distinguished Health Policy Fellow David Shulkin of the Penn LDI was appointed by President Trump as the 9th U.S. Secretary of Veterans Affairs (2017–2018). Non-resident Fellow at Columbia CGEP, Michael Dempsey, served as President Obama's intelligence briefer (2014–2017). Romano Prodi, one of the visiting Fellows of the Brown Watson Institute, served two terms as Italy's prime minister.

It is worth mentioning that university think tanks are qualified to provide research opportunities for the university's master's, doctoral and post-doctoral students, and to attract outstanding students to participate through research scholarship programs and related courses. In university think tanks, students are not only engaged in academic theoretical research, but also in the practice of policy research. Many Ivy graduate students and post-doctors engage in the think tank's research projects related to their majors and conduct dissertation research there. In SGS of Princeton, PhD and master's students account for almost half of the research team. The Think Tanks and Civil Society Program (TTCSP) runs internship programs for students and recent graduates, which helps the participants gain first-hand experience in public policy research. Students who have been trained in university think tanks are often more likely to find valuable job opportunities in the future.

4.2. How Do University Think Tanks Maintain Objectivity, Autonomy and Independence?

The credibility of think tanks comes from the independence and objectivity of their research. Diane Stone believes that the absolute autonomy and independence of think tanks is an illusion, and this is not conducive to think tanks achieving their primary goal—policy influence. She emphasized that a certain degree of academic neutrality and nominal independence can still be achieved (McGann et al. 2014). As the whole society becomes more and more aware of the value and significance of independent research, there will be less and less trust in think tanks that speak out for a certain interest group.

Think tanks established by well-known universities are often associated with the reputation of the university, so their research results are more likely to be trusted. To prevent the loss of research objectivity and enduring institutional credibility, university think tanks usually conduct independent research and operations.

To judge whether a think tank is independent, important evidence can be found from the role of the think tank's board of directors, the openness of its funding sources, the cultural tradition of the think tank, the relationship between the think tank and the stakeholders, the relationship between the think tank and the contracting party and so on. This part focuses on examining the independence of Ivy League think tanks from the perspective of the role of the board of directors of think tanks and sources of funding.

4.2.1. To Form a Board of Directors with Diverse Backgrounds

The main function of the board of directors is to ensure that the organization is moving in the right direction to accomplish its mission and to obtain the resources needed to carry out its work so that the think tank can maintain its normal and independent operation (Moncada and Mendizabal 2013). The composition and execution of the think tank's board of directors determine the overall reputation and influence of the think tank.

The think tank board emphasizes diversity in membership to provide a diverse range of perspectives when important matters are discussed. Many of the university think tank board members are influential figures, usually with diverse backgrounds, and many are elites and celebrities from academia, politics, business, and media, including former dignitaries and corporate giants with great influence. They not only bring prestige to the think tanks and increase their chances of obtaining funding, but also have good relationships with relevant decision-makers and are able to gain a voice in important domestic and international affairs.

The chairman and president of the board of directors are the most core leaders, whose philosophies and management styles determine the strategy of a think tank and how much it can achieve. The leaders of think tanks are also known as "policy industrialists" (Wang 2017). They promote the independent and healthy operation of think tanks through commercial operation and adopting various marketing mechanisms to keep them in good financial shape.

Overall, there are two main types of committee/board/council, one is to assist the think tanks with fundraising, and the other is to guide the development direction and advice on policy issues of think tanks, as shown in Table 3 (take the think tanks at Harvard and Columbia as a sample).

Most members of the financial support committee are from corporate sector, many of whom are senior business leaders, such as Founder, CEO, President, Chairman, Chief Executive Officer, Senior Advisor, and so on, in their companies. For instance, about 90% of members of the Belfer Center, HKS International Council come from the business sector; about 80% of the CGEP, Columbia Advisory Board come from companies.

The members of the guidance committee are usually engaged in academia and most of them are professors from the university where the think tank located. For example, the members of the CID, HKS Faculty Advisory Council are mostly professors; about 80% member of the WCFIA, Harvard Executive Committee are professors. These members generally come from an extensive range of fields and represent a wide scope of disciplines. This not only helps think tanks to carry out unbiased and objective research, but also helps think tanks to conduct research on complex issues across fields. Take the LDI at the University of Pennsylvania as an example, the Strategic Advisory Committee of the LDI consists of eight members from eight different Penn. schools. Table 4 presents the governance systems of think tanks at Harvard and Columbia University as examples.

Table 4. The governance of the Ivy League think tanks (take the think tanks at Harvard and Columbia as a sample).

Think Tank	Governance Form (Main Role)	Members of Board	
	International Council (financial support)	90% of the 57 members come from corporate sector	
Belfer Center, HKS	Center Board of Directors (guidance)	75% of 45 members are professors	
	Global Development Council (financial support)	All the 4 members are from corporate sector	
CID, HKS	Faculty Advisory Council (guidance)	The 9 members are mostly professors	
M-RCBG, HKS	Advisory Council (guidance and financial support)	Almost all the 42 people com from corporate sector	
	Advisory Board (financial support)	About half of the 12 member are from the corporate sector	
WCFIA, Harvard	Executive Committee (guidance)	About 80% of the 21 membe are professors	
	Steering Committee ("kitchen cabinet" for Faculty Director)	All 6 members are professor	
	Advisory Board (support)	About 80% of the 32 member come from corporate sector	
CGEP, Columbia	Academic Steering Committee (guidance)	17 members, almost all professors	

Notes: 1. Source: Think Tank Official Website. Some Ivy League think tanks either do not show the governance on their web site or do not have responsibility statements of the relevant committee. They are not listed here. 2. The retrieval time was 2020.

4.2.2. To Seek Diversified and Transparent Sources of Financing

Funding sources are the first important factor affecting the independence of think tanks. Public policy research relates to the interests of varied groups. Some funding organizations tend to support think tanks and scholars whose policy views are consistent with their own, because the results of certain policy research may bring great benefits to these funding organizations. Through the sources of funding and the proportion of funding composition that a think tank discloses to the public, we can gain a perspective on whether the output of the think tank is truly objective and impartial to some extent. In order to maintain the objective independence of academic research, think tanks must not be kidnapped by a certain interest group. Independent university think tanks tend to have more diversified funding sources.

Table 5 shows the number of different donors accepted by the Ivy League think tanks (take the think tanks at Harvard and Columbia as a sample). The funding sources of the think tanks include funding from foundations, corporations, organizations, and governments, from their respective universities and from individuals, many of whom are alumni. The main forms of funding for the think tanks at the Harvard HKS include Sponsored Grants—received from U.S. government agencies, foreign government agencies, multilateral agencies, private organizations and non-profit foundations, and Philanthropic Gifts—coming from individual alumni, friends of HKS, private organizations and non-profit foundations. In the Columbia Center on Global Energy Policy, donations from foundations, corporations and individuals are divided into Leadership Annual Circle and

Sustaining Annual Circle groups, each group members' annual contributions are required to be listed on the web. Diversified funding sources make the think tank research funds sufficient, and help the Ivy League think tanks remain independent and not be excessively controlled by their universities.

Table 5. Representative funding sources of Ivy League university think tanks (take the think tanks at Harvard and Columbia as a sample). Unit: number.

Think Tank	Fund/Foundation	Corp./Co.	Government	Individual	Others *
1. Harvard Ash Center for Democratic Governance and Innovation	17	26	4	3	2
2. Harvard Belfer Center for Science and International Affairs	9	1	1	-	1
3. Harvard Center for International Development	2	9	1	-	2
4. Harvard Mossavar-Rahmani Center for Business and Government	5	1	-	-	2
5. Columbia: Weatherhead East Asian Institute	18	2	2	7	5
6. Columbia: Center on Global Energy Policy	12	21	-	19	2

Notes: 1. Source: Think Tank Official Website. Some think tank websites reflect the sources of funding received over the years while others give the index to the funding received in a certain year. Those that do not show their funding sources on the official websites are not listed here. 2. The figures in the table are dynamic and not precise, only roughly reflect the approximate proportion of funding agencies. * "Others" include universities, estates, anonymous donations, etc.

Of course, not all think tanks with a relatively single source of funding are definitely not independent think tanks. For example, for the RAND Corporation, most of its funding income comes from contracts, but the financial funding source does not distort its research purpose and value orientation, and RAND Corporation is still a respected think tank. The Ivy League think tanks try to remain independent from the challenges of complex environments and they insist their activities are not controlled by the funders. Many university think tanks are open about their funding sources and have developed rigorous review and disclosure systems for funding contributions. For example, HKS has adopted an approach of "transparent engagement"; all the donations received by the Columbia think tanks must be approved via the standard University processes before being accepted, and the think tanks have discretion over how the funds are allocated.

4.3. How Do University Think Tanks Disseminate Ideas and Policy Research Products?

Think tanks are born to influence policy. According to Andrew Rich, the main changes that have taken place in the think tank world over the past few decades include the fact that think tanks have become more forceful in advocating their own research and analysis. Stone notes that a common tendency of new think tanks is to focus specifically on marketing and promotion. Of course, think tanks are primarily knowledge producers rather than advocates, but if they want to have an impact on policy, they need to be actively involved in some government affairs (McGann et al. 2014). In terms of enhancing their influence, university think tanks, like other types of think tanks, adopt effective results dissemination strategies to brand their think tanks. In addition, university think tanks have the advantage of a unique alumni network, and strong alumni resources are an intangible and valuable resource for university think tanks to shape their image.

4.3.1. To Disseminate Ideas and Products through Multiple Channels

The influence of think tanks on policy is inseparable from the continuous dissemination of the products. Unlike lobbying groups, which are legally allowed to lobby directly for policy, think tanks need to be connected to policy through a long-term channel of "ideas" (Leeson et al. 2012).

By holding forums/seminars involving academia, government departments, media, enterprises, think tanks or attending hearings, think tanks disseminate their thoughts, obtain the information related to decision-making, and expand the interpersonal relationship among decision-making circles. Thus, think tank policy advice will be delivered to the decision-makers more quickly. As think tanks are unofficial, flexible, and flat in management, they can conduct informal, flexible and frequent exchanges more easily, and can promote bilateral and multilateral consensus through track II diplomacy. Take the Belfer Center of HKS, ranked no.1 for consecutive years, for example, it conducted 630 op-eds and commentaries, 310 events, including presentations, seminars, workshops, and conferences, authored 185 publications, including books, reports, and journal and magazine articles in 2019. In a political environment where the usual lines of communication to policymakers are weaker, the Belfer Center of HKS has emphasized more field work, track II dialogues, participation in multilateral forums and has adapted to the way people consume news and policy analysis through social media, video, and short-form formats, to maximize impact.

The Ivy League think tanks are also actively disseminating ideas through projects. For example, the Pennsylvania Leonard Davis Institute of Health Economics awarded 13 COVID-19 Rapid Response Research Grants in May 2020, designed to produce policy insights directly related to the unfolding pandemic and its wide-ranging health effects. A year after the program of the Rapid Response Grant, the projects have generated important new insights relevant to pandemic response and preparedness for future infectious disease emergencies.

The Ivy League think tanks establish policy markets through various channels to project their new ideas and policy recommendations for decision-makers to be recognized. They consciously transform their specialized academic research results into language that can be understood by decision-makers and the public. In addition to publishing monographs, reports and academic articles, they also actively speak out in the recognized authoritative media and mainstream media, write popular articles, participate in TV programs and special columns, and disseminate academic ideas through social media and forums. The quick spread of think tank ideas and research results not only influences the public, but also indirectly influences decision-makers.

It is worth noting that in addition to having a strong research team, the think tank also has a relatively high proportion of personnel in the operation team responsible for the dissemination of ideas and the promotion of influence. These staff play an essential role in helping projects run smoothly, organizing events intensively, increasing media exposure, and promoting and formulating policies. As important think tanks outside the Washington D.C., the Ivy League think tanks attach great importance to staff teams. The communications contacts for the press alone at Belfer Center of HKS consist of titles such as Digital Communications Coordinator, Publishing Manager, Multimedia Producer, Associate Director of Communications and Director of Global Communications and Strategy.

4.3.2. To Participate in Decision-Making through Alumni Networks

Participating in decision-making through alumni networks is a unique advantage of university think tanks compared with other types of think tanks in influencing decisionmaking. Some well-known universities even directly sent the country's supreme ruler. Harvard University has cultivated eight US presidents. President John F. Kennedy, who took office in 1961, actively pursued the "New Frontier" policy and embarked on a comprehensive reform of domestic and foreign affairs. As a Harvard alumnus, Kennedy recruited a number of Harvard scholars to serve in the government.

The alumni can wield considerable power in the operation of the university think tanks. For example, the Belfer Center has played a major role in lowering the possibility of nuclear terrorism globally and reducing the number of countries with nuclear weapons from 52 in 1991 to 25 today, through analysis at the Belfer Center of HKS and implementation of policies by Belfer alumni in government.

In addition, personnel trained by university think tanks will bring the ideas and viewpoints of think tanks to future positions, which indirectly enhances the influence of university think tanks. When asked "What are you excited about with regard to the Center's current and future impact?" Aditi Kumar (2020), Executive Director of the Belfer Center replied, "The most exciting part of all this is the students. It's rewarding to see these students move on to impactful roles in the public and private sectors. Hopefully we'll be their first call when they face policy and management challenges in their careers".

5. Discussion and Conclusions

This paper intends to study the formation mode and thegeneration path of think tanks by taking the Ivy think tanks as an example. Firstly, it is necessary to study what is a think tank and the characteristics of a think tank. We summarize three basic characteristics of think tanks: based on academic research; operate with relative independence; aim to influence decision-making.

In the face of the current complicated and chaotic think tank industry, scholars have defined think tanks from different perspectives and roughly divided think tanks into two main categories: research-based think tanks and ideological think tanks. Through the examination of the origins of think tanks and the comparative analysis of the views of scholars who have studied think tanks over time, we find that whether it is Paul Dickson and Harold Orans, who studied think tanks earlier, or Andrew Rich and James McGann, famous think tank scholars recently, they all believe that the important core competitiveness of think tanks is their professional and independent research capability. Think tanks have their decision-making and consulting functions and influence naturally produced based on their specialized and deep academic research capabilities. Being responsible for the long-term interests of the country and the public is the basis for think tanks to have lasting influence. The Ivy League think tanks have made a lot of effort to protect against risks to research integrity and to ensure their research is not affected by governments, companies and other interest groups, but they still face challenges maintaining independence. What do think tanks do if their research results contradict the university's potential interests? If the think tanks are tightly supervised by their university and the relationship with the university is too close, will the independence be interfered with, and innovation reduced? Will the think tank lose its independence in order to obtain a stable source of funding? These are important issues for the Ivy League think tanks in maintaining sustainable development. If university think tanks fail to remain independent, their reputation will be damaged in the long run. Only think tanks with long-term reputations are truly influential think tanks. The purpose of think tanks is to ensure politicians adopt their suggestions. However, if university think tanks take an obvious stance and look at issues through colored glasses in order to make policy makers adopt their views, they are likely to deviate from the scientific and professional research, and the reliability of their research results will be questioned. Sometimes the think tank's advice is not adopted; it is not necessarily because the views themselves are problematic, but it may just be that the views are not in line with the tastes of a certain party or a certain policymaker at the time. As long as it is a scientific and objective research conclusion based on objective reality, these research results will also play a positive role in helping people rationally and comprehensively understand the nature of the problem, develop rational thinking, and change their preconceived ideas. This meaning and function is no less than that of being adopted by the government.

The article clearly points out that a "think tank" that only advocates and lobbies but does not conduct original research cannot be regarded as a think tank in its original sense, nor should it be labeled as a think tank. As research and consulting institutions, tank tanks are different from advocacy or lobbying organizations, which promote political and ideological ideas, or sell ideas that advance the interests of funders. Some organizations use the tax status granted under Section 501(C)3 to fabricate agendas and use the name of think

tank to disguise their lobbying nature. Some organizations also create 501(c)4 organizations to "split". This behavior reveals the very intent of these organizations (Chance 2016). Due to the different nature, it is inappropriate to compare such organizations with real think tanks and divide them into a system equivalent to research. And this, is the theoretical supplement and contribution of this paper to the think tank research community.

The paper presents the main questions to be solved in the construction of university think tanks from the basic characteristics of think tanks through the analysis of six variables, including mission/strategy/goals, human resources, governance structure, funding sources, achievements and activities, and network resources; it figures out the formation mode and generation path of university think tanks (see Figure 2), and clearly states that the first-class university think tanks organically combine the academic pursuits with policy making participation. This is the contribution of this paper to guide the practice of think tank construction.

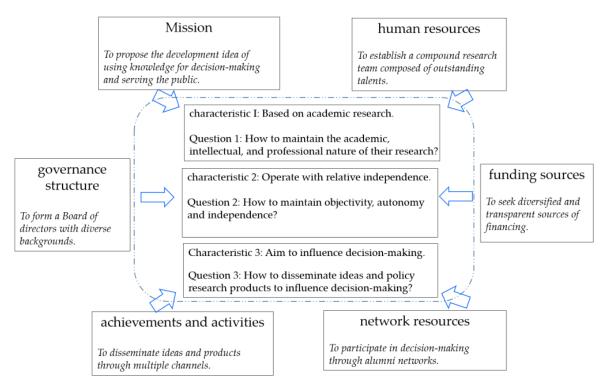


Figure 2. Framework diagram of university think tank generation path and formation mode.

The study of the nature and operation of think tanks in this paper can make the public more sensible to discriminate various current "think tank achievements" and distinguish which ones are more trustworthy.

There are limitations in this study, and it is worthwhile to continue to explore them in depth in future studies. On the one hand, a clearer and more complete conceptual system of think tanks is needed to better guide the practice of think tanks; on the other hand, the number and scale of research samples need to be expanded, the operational models and success factors of typical think tanks need to be studied more comprehensively, and the value of think tanks in the national governance system needs to be more clearly demonstrated. For example, in maintaining science and professionalism, how do think tanks develop new research methods and modeling tools to address new and emerging real-world problems? How can think tanks control the quality of results with scientific and standardized management? In terms of maintaining objectivity and independence, how can think tanks not become tools of power struggle? In terms of enhancing influence, how can think tanks establish stable communication with the media? How can think tanks disseminate their ideas more widely through the internationalization of their organizational operations? Each of these issues deserves to be studied in depth. In the next step, the authors hope to specialize in some of these topics.

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