

Examining the dynamics among multiple actors through the mobilization of Public Procurement for Innovation in South Korea.

Dongho Han^{*}, Tae Hyuk Kwon^{}, Byoung Gun Kim^{***}**

Abstract This research focuses on examining the mobilization of Public Procurement for Innovation (PPI) in South Korea as a case study in technology innovation. By using the lens of policy mobility and qualitative research methodologies, it emphasizes the circulation of PPI is an outcome of an assemblage of multiple actors who are responsible for the introduction of PPI. The Public Procurement Service in South Korea has actively sought to understand and adopt the concept of PPI from developed countries. This initiative has been localized under the umbrella of ‘innovative technology and product.’ Throughout the mobilization, a cadre of technocrats, the Innovation Procurement Competence Center plays a pivotal role, and particularly encourages Small and Medium Enterprises to bolster their export capabilities, resulting in a reciprocal circulation of policies and programs from South Korea to foreign countries as well as within intra-urban area. Consequently, the above findings, revealing the nuanced evolution of policy mobility in local contexts, hold practical significance as they provide valuable insights and lessons for urban studies.

Keywords Policy Mobility, Public Procurement for Innovation, Korea Institute of Procurement, Innovation Procurement Competence Center

I. Introduction

This research aims to scrutinize the mobilization – encompassing the processes of conception, advancement, and evolution – of Public Procurement for Innovation (PPI) in South Korea, serving as an empirical case study within the domain of technology innovation. The conceptualization of technology innovation has undergone formulation, development, and evolution across temporal and spatial dimensions. The traditional perspective on technology innovation, focusing solely on the change and development of technology itself,

Submitted, December 26, 2023; 1st Revised, January 18, 2024; Accepted, January 29, 2024

* Associate Researcher, Korea Institute of Procurement, Seoul, Korea; dhsquare@kip.re.kr

** Corresponding, Associate Researcher, Korea Institute of Procurement, Seoul, Korea; thkwon@kip.re.kr

*** Division Director, Korea Institute of Procurement, Seoul, Korea; kimbgun@kip.re.kr

however, faces limitations in elucidating contemporary societal and regional development driven by technology innovation (Seo et al., 2021; Ko et al., 2021). In response to the traditional concept of technology innovation, presently, some scholars posit that the essence of technology innovation encapsulates ‘activities wherein diverse stakeholders in both private and public sectors engage in the creation, utilization, dissemination, and transfer of knowledge based on science and technology to address individual requisites and resolve societal issues (Feo et al., 2022).’

In this context, this research plans to explore the circulation of PPI in South Korea. In terms of PPI in South Korea, it seeks to improve the quality of public service through the innovativeness of new technologies and products. As this improvement leads to regional development, the mobilization of PPI could become an epitome of the technology innovation. Moreover, this study specifically examines the mobilization of PPI within the context of South Korea, addressing a gap identified in conventional policy mobility literature. In such literature, researchers typically investigate the circulation of policies, knowledge, and experiences across different contexts. However, existing literature in this field has predominantly adopted a dualistic approach, emphasizing either national or city-level mobilization, and primarily concentrating on domestic policy and knowledge circulation (Borén, Grzyś, & Young 2020; Prince 2017; Grandin & Haarstad 2021; Silvestre & Jajamovich, 2021).

In response to these limitations, this research takes a novel perspective by delving into the intricate dynamics of inter-national mobilization. It contributes to broadening the scope of policy mobility by examining the assemblage of diverse perspectives from various actors responsible for facilitating the circulation of PPI. This approach provides a more comprehensive understanding of the complex network involved in the trans-national mobilization of PPI.

In light of the preceding paragraph, a few following research questions have emerged:

- How has public procurement for innovation in South Korea been mobilized, evolved, and localized?
- To what extent has policy mobility, as conceptualized in this research, involving a combination of circulation, evolution, and localization of policy, impacted the local economy and society?

Hence, this research establishes that the proposed definition is applicable empirically and facilitates researchers in directing their attention toward a more intricate and nuanced analysis of empirical cases within the realm of technology innovation. Ultimately, this contributes to the expansion of the technology innovation literature as well.

The following section is divided into four parts: (1) Interpreting the circulation of knowledge and ideas; (2) Methodological framework; (3) Empirical

approaches to interpreting local policy mobility; and (4) summarizing the entire narrative of this research under the heading of the Conclusion.

II. Interpreting the circulation of knowledge and ideas

The complex nature of the knowledge and policy circulation process cannot be reflected accurately through the lens of traditional theories. For instance, the concept of policy transfer, developed by scholars in political science, is criticized for its lack of full attention to the socio-spatial and scalar elements of the transfer (McCann, 2011). In the policy transfer scholarships, policies are regarded as ‘fully formed, off-the-shelf policies’ (Peck & Theodore, 2001, p.449), which are completely delivered from A in one to B in another context by understanding transfer in abstract terms, as ‘dissocialized movement’ (McCann, 2011, p.117). Notwithstanding, a complete transplant without any loss and conflict cannot happen in the real world. Since policy making is often messy, there is an under-emphasis on the detailed content of the policy and idea circulation process in the conventional concept (Dolowitz & Marsh, 1996). Such detail includes, *inter alia*, political context, economic resources (*ibid.*), the increasing vagueness of actors and knowledge (Werner & Strambach, 2018), the complexity of policy programs (Rose, 1993), institutional and structural impediments and ideological compatibility between transferring countries (Benson & Jordan, 2011). Furthermore, policy transfer scholarships tend to focus on the national scale, and they maintain a problematic separation between the domestic and the international (McCann, 2011) in the current globalized circumstance.

This has led to a reconceptualization of the circuits of knowledge and policy as something not static (with linear causality) but rather as something that is constituted through relations and interactions (Massey, 2004), particularly in the field of social science and human geography (Sheller & Urry, 2006, Cresswell, 2010). Such relational thinking results in urban scholars considering cities as the sites of multiple flows of people, commodities, information, and networks that are constantly interacting (Raco et al., 2016). Healey (2007) builds upon this by suggesting that the post-modern society is recognized as a dynamic complexity and many contingencies of urban conditions. Under neoliberalism, contemporary urban areas can be (re)produced by a network of histories, socio-political structures, social relationships, movements of labor and capital and communications with cross-scale governance, rather than a conventional place as a set of boundaries with categorized actors. Consequently, a relational thinking approach leads geographers to investigate urban issues concerning flows and networks, the dynamic over the static and interactions over objects.

In contrast to the common conceptualization of knowledge and policy circulation, which only focuses on territorially, politically and socially bounded states, the policy mobilities approach emphasizes various scales of unbounded entities (as crucial circulatory infrastructure such as states or actors of states). This brings about more analyses of the knowledge and policy circulation process in relation to the transnational and trans-local constitution of institutional relations, governmental hierarchies and policy networks. Such inter-scalar conditioning of governance, through which knowledge and policy models move and in which they mutate, results in an assemblage of policy models – bundles of knowledge and techniques purposefully gathered together for particular reasons – and expertise drawn out of circulation and gathered in the local context. As policies circulate, they usually not only change and mutate over time and through interactions but also become coherent fixed entities through a process of assembling, disassembling and reassembling (McFarlane, 2009).

The theory of policy mobility is characterized by ‘a concern for the actors, practices, and representations that affect the (re)production, adoption and travel of policies, and the best practice models across space and time’ (Temenos & McCann, 2013). The primary issue for policy mobility researchers is ‘how are urban policies produced in global relational contexts, transferred and reproduced from place to place and negotiated politically in various locations?’ (Ward, 2011). As ‘mobilities are tied to and facilitated by various moorings, organizing nodes, or fixed infrastructure’ (Temenos & McCann, 2013), scholars have attempted to address this question by theorizing the relationships between fixity – specific sites (territoriality) – and mobility – global forces, connections, and imaginaries (relationality). This approach results from the assumption that knowledge is only actionable and productive when embedded or territorialized in specific social, spatial and institutional contexts, even though the knowledge might be understood to flow around the world (Peck & Theodore, 2010). In other words, the idea of policy mobilities ‘provides an opportunity to think about the transfer, translation, or transformation of policy models and ideas in terms of the embodied practices across, ... trans-local fields of power’ (McCann, 2011).

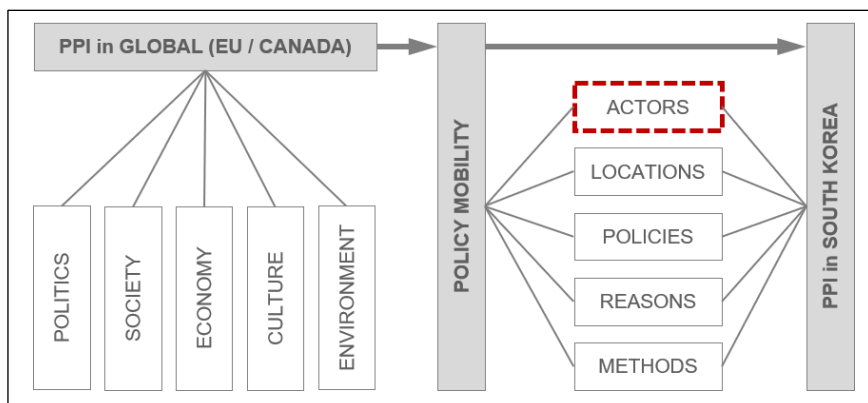


Figure 1. Theoretical framework in this research (Source: the Author)

Regarding an empirical case study of PPI, this research assumes that it has been mobilized by the assemblage of multiple actors' diverse perspectives. Hence, this study aims to explore the perspectives of multiple actors on public procurement for innovation and investigate the inter-urban implications of specific actors within the narrative of evolutionary policy mobility.

Furthermore, the existing body of literature on policy mobility has primarily adhered to a dualistic approach, often focusing on either the national or city level of mobilization rather than encompassing a multinational perspective and the domestic circulation of policy and knowledge, and specific actors with a particular emphasis on international consultants, and their roles in the circulation of policy and knowledge (Borén, Grzyś, & Young 2020; Prince 2017; Varró & Bunders 2020; Bunnell, Padawangi, & Thompson 2018; Grandin & Haarstad 2021; Silvestre & Jajamovich, 2021).

This research fills such a gap in policy mobility literature by examining the matured and evolved pathways (inter-national level) within the mobilization of policy and knowledge, viewed as integral components of the localization of external policies and knowledge under the diverse perspectives of multiple actors.

III. Methodological framework

1. Data collection

For the primary and secondary research tasks, the author of this research endeavored to collect official documentation regarding innovative technology and products archived in the Public Procurement Service (PPS), South Korea.

The pivotal work in data collection is to explore major issues within the delivery of policy and programs regarding innovative technology and products. As the official documentations elaborate core policies, programs, and concepts of the project officially, it is the formal and easiest approach to explore the implementation of innovative products.

For secondary material, the research will utilize newspapers, news magazines, newsletters and websites published by diverse organizations. Compared to official documentation, such materials will provide regional circumstances, specific opportunities and challenges and detailed information in terms of the implementation of innovative products. As the primary research task can set up the frame for this research, the secondary material can flesh out the frame with greater detail.

Semi-structured interviews were aimed at mapping the strategic policy making process regarding innovative products and the relation to the adaptation of global policy ideas. Hence, this research will conduct an elite interview with civil servants, researchers in a government-funded research institute and foreign professionals related to the international program. Regarding elite interviews, snow-ball sampling is used since it is somewhat difficult to recruit essential interviewees. As participants have been tightly networked through the delivery of innovative technologies and products, it is useful to achieve valuable and fruitful resources for this research.

2. Data analysis

Thematic analysis is a method for identifying, analyzing and reporting patterns within data. It minimally organizes and describes the data set in detail. It also interprets various aspects of the research topic through coding the material (Boyatzis, 1998, cited in Braun and Clarke, 2006). At this point, it is important to acknowledge this study's theoretical position and values in relation to qualitative research. Through the hand-writing method, specific codes (detailed information within diverse types of documentation) will be highlighted and sorted from collected data. The thematic analysis has the purpose of synthesizing the textual information to assist in the in-depth understanding of the results.

One of the most prevalent approaches to thematic analysis is to search out underlying themes in the materials being analyzed (Bryman, 2016, p557). Through the coding phase, the analysis extracts specific themes illustrated with brief quotations from newspaper articles, magazines and newsletters, and websites. Based on these codes, abundant useful materials were organized into a story of public procurement for innovation in South Korea. It is very helpful to address such implicit meanings effectively by 'revising the themes or

categories that are distilled from the examination of documents (Bryman, 2016, p.559)?.

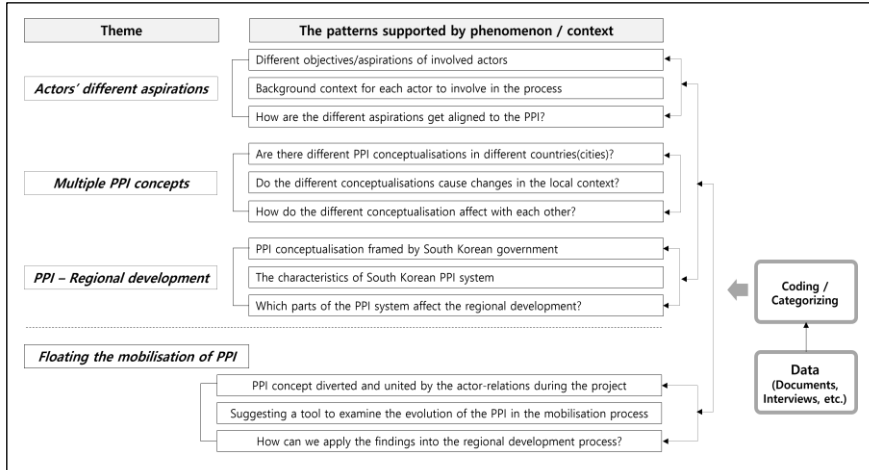


Figure 2. Code used in this research (Source: the Authors)

The narrative analyses start from the investigation of ideographs in documents and interview resources. The context of an ideograph is able to reveal the way in which the narrative changes over time. Furthermore, storytelling is a principal way of constructing shared meanings, providing a plot that helps to articulate policy mobility (Jokinen et al., 2018) and a useful analytic concept to address the complexity of policy mobility. In the mobilization process, a storyline is a tool through which actors from different contexts and interests can relate to another context. This is why the narrative analysis focuses on identifying different storylines under the grand narrative of public procurement for innovation.

IV. Empirical approaches to interpreting local policy mobility

1. Public procurement for innovation in the developed countries and South Korea

The notion of Public Procurement for Innovation was initially proposed in the European Union (EU) and North America. PPI entails a scenario in which a national government assumes the role of the primary purchaser of innovative products from manufacturers, typically those falling under the category of Small and Medium Enterprises (SMEs). This approach aims to stimulate and support

technology innovation by encouraging the aforementioned manufacturers. Notably, the United States, Canada, the EU, and other developed nations emphasize the significance of PPI as a central policy for fostering national technology innovation.

Two primary policies within the European Union (EU) that the South Korean government endeavored to learn and implement in the country are Public Procurement of Innovative Solutions (PPI) and Pre-Commercial Procurement (PCP). PPI is a strategy tailored for acquiring products and services that do not necessitate a new phase of research and development. Instead, it centers on products or services that have already advanced to a late stage of development, having been nearly finalized or introduced to the market with a limited market share. On the other hand, PCP is a policy designed for procuring products and services requiring a relatively prolonged research and development process, encompassing the design, development, and creation of a prototype for products and services.

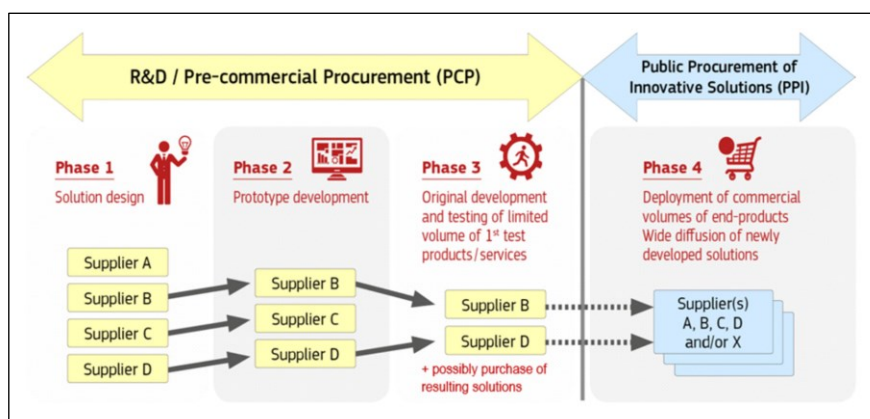


Figure 3. The relationship between PCP and PPI in the EU

Source: European Commission, 2021

Public Services and Procurement Canada (PSPC) has initiated the Build in Canada Innovation Program (BCIP) with the objective of fostering the commercialization of innovative products. Since 2013, PSPC has allocated a budget ranging from 15 to 30 million US dollars for the primary purpose of procuring these products. The intention is to supply them to government offices engaged in pre-commercialization tests, thereby validating their efficacy.

In South Korea, there hasn't been a policy precisely akin to the aforementioned PPI; however, two programs have been established to support the acquisition of innovative technological products through public procurement. These are: (1) the Preferential Purchasing System for New Excellent Product

(NEP) and (2) Support for Purchasing Research and Development (R&D) outcomes.

The former program enhances the technological capacity of Small and Medium Enterprises (SMEs) by primarily procuring products certified at a specified level of achievement by various government entities. However, this program faces a significant challenge as it necessitates a certain amount of time for the certification of innovative technologies and products before entry into the Korean public procurement market. For example, the evaluation of technology innovation is conducted by a panel of relevant experts and academia. In light of intensifying competition, developers of innovative technologies and products must minimize the development period. Consequently, providing swift and timely support in the early stages of development is crucial. Nevertheless, the institutional process for assessing the level and significance of innovation in technologies and products hampers innovation attainment. Recognizing this issue, the Public Procurement Service has contemplated loosening these stringent procedures and introducing a certain degree of flexibility at each stage.

The latter program, dedicated to research and development (R&D) and largely funded by the South Korean government, has faced criticism from numerous experts and professionals. Despite the government's investment exceeding 20 trillion Korean won in R&D projects, the outcomes in terms of commercialization have been limited. Furthermore, these outcomes lack direct connections to both domestic and global markets (Jongwha Choi et al., 2016). Consequently, SMEs often prefer to introduce developed products to the market rather than engage in the R&D program for further development. In this context, some policymakers argue that supporting public offices in purchasing products through public procurement is a more efficient approach than investing in the R&D program. Others contend that a specific PPI policy, beneficial for enhancing both publicness and innovativeness, should be formulated. This marks the initial phase of the exploration of PPI policy and programs within the Public Procurement Service of South Korea.

2. Diverse perspectives on PPI

Then, how has the idea of PPI been mobilized in the South Korean context? How has the idea of PPI been introduced and further evolved within the South Korean context? There is probably no precise process for the mobilization, but complicated and sophisticated political, institutional and cultural (local) circumstances behind the introduction of PPI in South Korea. This research will have a look at diverse actors who have had responsibility for the delivery of PPI and explore the interactions among them within the mobilization of PPI.

2.1. The presidential office of South Korea

Innovative growth, defined as the advancement of innovative technologies and products that serve as the impetus for national development, embodies South Korea's future vision in response to the dynamic challenges posed by the rapidly evolving global competitive landscape driven by the 4th Industrial Revolution. This vision concurrently reflects the strategic intent and orientation of the Blue House in preparing for future industries. Moreover, the President of South Korea has diligently scrutinized the present state of innovative growth, consistently underscoring its pivotal importance.

“To position South Korea as a globally leading technologically advanced nation, the national government should transition from being a mere observer to an active assessor of innovative technologies and products. In this role, the South Korean government would pose questions about innovative technologies to Small and Medium Enterprises (SMEs). If SMEs successfully address these questions, the central government would act as the inaugural purchaser through public procurement. This transformative approach would effectively turn the South Korean public procurement market, valued at an estimated 138 billion US dollars, into a dynamic arena for fostering technology innovation (An external consultant who worked in the field of economic science of the Presidential office of South Korea).”

To invest such future industries, in particular, the presidential office of South Korea was keen to support innovative SMEs, which plays a pivotal role by leading national industrial development with innovative technologies.

The presidential office of South Korea firstly tried to develop the existing policy – Preferential Purchase by Public Institutions in the public procurement system – in valid. In the preferential purchase by public institutions, there are 16 types of technological development products. Under the public procurement system, public institutions should priorly purchase such technological development products developed by SMEs.

From 2018, the presidential office, however, believed that the technical specifications of 16 types of technological development products should be clarified. At that time, it was easy for SMEs to achieve relevant titles as a technological development product without real ‘innovativeness.’ As the presidential office emphasized the importance of innovativeness for winning in global competition, such problematic issues should be covered.

However, it is challenging to revise the policy with a number of contextual considerations. For instance, there were a number of stakeholders to be

persuaded for the revision of the preferential purchase by public institutions. Hence, the presidential office finally determined to announce the introduction of a new policy regarding support for SMEs, facilitating their development of innovative technologies and products. This is the very beginning of consideration regarding the introduction of PPI in South Korea.

2.2. Academia

The presidential office also organized a think tank or a task force for the achievement of innovative growth. A few academics play an essential role within the small group. They particularly suggested the role of the national government during the development of either policies or institutions.

“While the government cannot single-handedly spearhead the 4th Industrial Revolution, it bears the responsibility of acting as a catalyst within the trends initiated by private firms (An academic who worked as a consultant of the Presidential office of South Korea).”

Furthermore, academic professionals advocated for the simultaneous implementation of research and development (R&D) alongside direct purchasing as a strategy to attain technology innovation. They posited that if the national government ensures a specified level of procurement for innovative technologies and products, manufacturers of innovative products can focus on R&D projects without being distracted by economic concerns. Additionally, these professionals recommended a revision of the existing public procurement system in South Korea, specifically the low-bid procurement approach, which prioritizes the price of products over their quality or conceptual merit. They asserted that the localization of PPI in South Korea may remain elusive in the long term without a shift in this system.

“To address the enduring challenges of sustainable growth and employment in the contemporary era, the South Korean government must actively foster and sustain ‘innovative growth’ (An academic who worked as a consultant of the Presidential office of South Korea).”

In short, similar to the presidential office’s perspective on ‘innovative growth,’ academia also strongly believed that there were several things that the national government should conduct. One of the most important things among them is creating a proper policy or institution that secures a certain period of time and funds for the development of innovative technologies and products.

2.3. Public Procurement Service in South Korea

PPS in South Korea has to prepare a method for resolving problematic issues raised by the presidential office. Moreover, the appointment of a new administrator of PPS, South Korea impacted such response of PPS. Since the new administrator of PPS was an officer who worked for the presidential office of South Korea before, he totally understood the intention of the presidential office and completely focused on relevant tasks during the tenure of the administrator.

“He is the most appropriate person who can completely understand and deliver tasks for PPS, as suggested by the presidential office through his abundant experience, knowledge of economic policy, and excellent communication skills (An officer who worked for the Presidential office of South Korea)”

However, for the practical level of officers in PPS, it was challenging (1) to adapt innovative technologies and products within the field of public procurement and (2) to provide a rigid system of public procurement with flexibility, which accelerates the adaptation process of innovation.

In this context, the PPS of South Korea tried to create a new policy regarding innovative technology and products. In particular, the PPS of South Korea has taken note of the Build in Canada Innovation Program (BCIP) implemented by the Canadian government. This program supports the trial purchase of innovative technological products, presenting a potential model for addressing challenges in the South Korean procurement landscape.

“The BCIP represents an official testing mechanism overseen by the Canadian central government. It involves the evaluation of specific technologies and products deemed innovative through a pilot purchase program. This program entails acquiring a pilot model and introducing it to the public procurement market (An officer who worked for the introduction of PPI in the PPS of South Korea).”

Since 2016, PPS of South Korea has undertaken a comprehensive examination of Canada’s BCIP, eventually initiating and implementing its own “pilot purchasing of innovative product” program in 2019. In the pursuit of this program, representatives from the PPS of South Korea made multiple visits to PSPC to exchange knowledge, experiences, and ideas.

Notably, the PPS of South Korea did not blindly adopt the Canadian policy and institutional framework for public procurement. During that period, numerous developed countries, including the U.S. government, were actively

engaged in programs aimed at incentivizing manufacturers of innovative products to pursue research and development without economic constraints. The global context and examples from around the world became a source of concern for the PPS, prompting the Korean government to expedite the creation of a specific short-term program.

2.4. Korea Institute of Procurement

Whilst the presidential office of South Korea, Academia and Public Procurement Service (PPS) of South Korea focused on an institutional approach to the growth of innovative technology, the Korea Institute of Procurement (KIP) concentrated on the operation of such policy or institution in practice. In particular, even the relevant policy or institution regarding innovative technology and products would be created, there was no way – including practical methods and actors – to supervise such policy or institution. For instance, the evaluation of specification of innovative technology and products, the designation, management of them and additional support for SMEs that have developed the innovative products should be conducted by a certain group with the support of PPS.

In such circumstances, a significant and meaningful institutional change took place at KIP in 2021. Responding to recommendations from the academic sphere, the Innovation Procurement Competence Center (IPCC) was established under the KIP. This research center specializes in public procurement and collaborates with the Public Procurement Service of South Korea. Operating as a dedicated task force, the IPCC focuses on aiding companies with innovative technologies and products. Its primary responsibilities include supporting the PPS in the effective and efficient registration, management, and supervision of various innovative products, in addition to conducting diverse types of public procurement research.

The establishment of this center distinguishes itself from the policies and institutions of other nations, as it features a professional institute with a cadre of technocrats spanning various academic fields, including management, industrial engineering, statistics, marketing, architectural engineering, and urban studies. This diverse expertise allows for the consideration of a myriad of public issues related to PPI and facilitates the proposal of multi-perspective solutions for the further development of PPI.

Beyond merely providing policies and institutions related to PPI likewise other countries already operating such programs ahead of South Korea, the center actively supports Small and Medium Enterprises (SMEs), showcasing, through practical assistance, the efficacy of PPI policies. For instance, PPS and IPCC created and supported, respectively, a novel market termed the ‘online innovative product market’ to manage innovative products efficiently and provide SMEs with opportunities to advertise their innovative technologies as

well as innovative products to government agencies.

Moreover, the process of designating a product as innovative and participating in the PPI program involves two tracks: (1) Track 1 (Research and Development), emphasizing collaboration between individual government arms and private enterprises for the development of innovative technologies and products; and (2) Track 2 (demand-side suggestion), where private firms identify urban problems and propose new solutions to relevant government offices or departments through innovative technologies and products. These two distinct approaches, differing from foreign countries' grant-type support for PPI SMEs, cater to diverse requests from both the public and private sectors.

3. Policy mobility as the outcomes of the assemblage of multiple actors' perspectives

As a result of the assemblage of different perspectives on innovative growth – particularly concerning innovative technologies and products, the idea of PPI has been mobilized in South Korea.

In the period of introduction of the PPI, the presidential office created a circumstance by emphasizing the importance of innovative growth for the next generation of national 'growth machine (Molotch, 1976).' Then, academics became advisors or consultants who suggested the necessity of a policy or institution with specific characteristics and global case studies. As an 'incoming policy consultant' mentioned in the policy transfer framework (McCann, 2011), PPS of South Korea actively learnt and adopted foreign countries' PPI concept – could be termed 'lesson' (Rose, 1991) – and the Korea Institute of Procurement endeavored to localize it. Although there would be slightly different levels of contribution to the mobilization of PPI, it is clear that the mobilization of PPI is 'tied to and facilitated by various moorings, organizing nodes, or fixed infrastructure (Temenos & McCann, 2013).'

Moreover, the evolution of PPI in South Korea has had a notable impact on additional projects, particularly those related to the export of K-Innovation (innovative technologies and products). Since 2023, both the PPS and the KIP have collaborated to offer innovative SMEs the opportunity to conduct test beds in foreign countries. Specifically, through partnerships between PPS and the Korea International Cooperation Agency (KOICA), as well as PPS and the Korea Trade-Investment Promotion Agency (KOTRA), seven innovative products have been designated for participation in the test-bed abroad program. Moreover, in early 2024, PPS plans to select more than 20 innovative products for the Export-leading Test-bed Abroad Program, an initiative fully organized by PPS.

Additionally, PPS has endeavored to establish a new Official Development Assistance (ODA) project that leverages innovative technologies and products to enhance the quality of public services. These export-support policies and programs not only facilitate the circulation of ideas and policies related to K-Innovation but also serve as a shortcut for the dissemination of such innovations on an international scale.

V. Conclusion

This research endeavors to examine the evolution and implementation of policies within domestic settings, a phenomenon that can also be interpreted as the inter-urban circulation of policies. Additionally, the study aims to emphasize the mobilization of policies and knowledge on a global scale. By delving into the background and perspectives of various actors involved in the Public Procurement of Innovative solutions, the research unveils the processes through which policies evolve and become localized (implemented domestically).

The culmination of this investigation provides insights into the answers to the two primary research questions in this study:

- How has public procurement for innovation in South Korea been mobilized, evolved, and localized?

In line with the presidential office's commitment to fostering a new generation of industry through the PPI policies and programs, the Public Procurement Service in South Korea has actively sought to understand and adopt the concept of PPI from developed countries. In this circumstance, academia worked as a consultant by facilitating the PPS to learn and deliver PPI. The establishment of the Innovation Procurement Competence Center (IPCC) within the Korea Institute of Procurement led to the proactive implementation of the circulation of PPI. Consequently, this initiative has been localized under the umbrella of 'innovative technology and product' and tried to be mobilized to foreign contexts with diverse programs within the IPCC.

- To what extent has policy mobility, as conceptualized in this research, involving a combination of circulation, evolution, and localization of policy, impacted the local economy and society?

Throughout the aforementioned process, the Innovation Procurement Competence Center (IPCC) within the Korea Institute of Procurement (KIP)

plays a pivotal role. The IPCC has made efforts to establish a novel market termed the 'online innovative product market' and is committed to its sustenance through diverse additional policies and programs. Notably, it actively encourages Small and Medium Enterprises (SMEs) to bolster their export capabilities, resulting in a reciprocal circulation of policies and programs from South Korea to foreign countries as well as within intra-urban areas.

There is primarily a significant contribution made by this study. The theoretical framework of policy mobility holds particular relevance to the South Korean context, where there is a discernible trend of urban policies being transferred from foreign contexts and subsequently adapted to local areas. In particular, the forces of globalization and urban competitiveness compel politicians, policy makers, civil servants, planners, and developers to engage in the competitive import and export of global leading examples and localized practices. The common approach involves attempting to replicate a successful policy and knowledge in its entirety from one context to another. This research highlights not only the dissemination of policy but also the phenomenon of policy mobility following learning, localization and evolution. In the contemporary era, with its complex array of contexts, actors, and relationships, the delivery of policy and knowledge requires careful consideration. The study suggests that revealing the nuanced evolution of policy mobility in local contexts, holds practical significance as it provides valuable insights and lessons for urban studies.

This research acknowledges certain limitations. The findings primarily rely on elite interviews and official documents, implying that the depth of information needed to address real-world practices might be somewhat constrained. Additionally, official documents often contained rhetorical expressions without clear explanations or definitions, posing challenges in interpreting the implications of such language in practical applications. Addressing these limitations could be achieved through future research efforts incorporating more detailed qualitative materials, thereby enhancing the robustness of the research outcomes. Furthermore, if specific criteria, indicators, or guidelines were developed to measure or evaluate the extent to which the domestic idea of PPI has influenced other foreign countries, it could present a valuable opportunity for further research. This could involve tracking the evolution and development of the traditional concept of PPI globally.

References

- Benson, D. & Jordan, A. 2011. What have we Learned from Policy Transfer Research? Dolowitz and Marsh Revisited. *Political Studies Review*, 9, 366-378.
- Borén, T., P. Grzyś, and C. Young (2020). Intra-urban Connectedness, Policy Mobilities and Creative City-Making: National Conservatism vs. Urban (neo) Liberalism, *European Urban and Regional Studies*, 27(3), 246–258.
- Bunnell, T., R. Padawangi, and E.C. Thompson. (2018). The Politics of Learning from a Small City: Solo as Translocal Model and Political Launch pad, *Regional Studies*, 52(8), 1065–1074.
- Choi, J., Chung, J., Lee, K., Lee, J., Kim, E., Lee, Ch. (2016). Framework and Implementation Strategy of Public Procurement for Technological Innovation in Korea, Science and Technology Policy Institute.
- Cresswell, T. 2010. Towards a Politics of Mobility. *Environment and Planning D: Society and Space*, 28, 17-31.
- Dolowitz, D.P., & Marsh, D. (1996). Who Learns What from Whom: a Review of the Policy Transfer Literature. *Political Studies*, 44, 343-357.
- European Commission (2021). Horizon Europe – The EU Research & Innovation Programme (2021-2027), European Commission.
- Feo, Elena, Spanoghe, Pieter, Berckmoes, Els, Pascal, Elodie, Mosquera-Losada, Rosa, Opdebeeck, Alexander, Bursens, Sylvia (2022). The multi-actor approach in thematic networks for agriculture and forestry innovation, *Agricultural and food economics*, 10 (1), 3-26.
- Grandin, J., and H. Haarstad. (2021). Transformation as Relational Mobilisation: The Networked Geography of Addis Ababa’s Sustainable Transport Interventions, *Environment and Planning D: Society and Space*, 39(2), 289–308.
- Healey, P. (2007). *Urban Complexity and Spatial Strategies: Towards a Relational Planning for Our Times* (1st ed.). Abingdon: Routledge.
- Ko, Chang-Ryong, Lee, JongYun, & Seol, Sungsoo (2021). Long-term Growth Patterns and Determinants of High-growth Startups? Focusing on Korean Gazelle Companies during 2006-2020, *Asian Journal of Innovation and Policy*, 10(3), 330-354.
- Massey, D. 2004. Geographies of responsibility. *Geografiska Annaler. Series B, Human Geography*, 86, 5-18.
- McCann, E.J. (2011). Urban Policy Mobilities and Global Circuits of Knowledge: Toward a Research Agenda. *Annals of the Association of American Geographers*, 101(1), 107-130.
- McFarlane, C. (2009). Translocal assemblages: Space, power and social movements. *Geoforum*, 40(4), 561-567. doi: 10.1016/j.geoforum.2009.05.003
- Peck, J., & Theodore, N. (2010). Mobilizing policy: Models, methods, and mutations. *Geoforum*, 41(2), 169-174. doi: 10.1016/j.geoforum.2010.01.002
- Prince, R. (2017). Local or Global Policy? Thinking About Policy Mobility with Assemblage and Topology, *Area*, 49(3), 335–341.
- Raco, M. (2018). ‘Private Consultants, Planning Reform and the Marketisation of Local Government Finance’. In Ferm, Jessica

- Rose, R. (1991). What is Lesson-Drawing? *Journal of Public Policy*, 11(01), 3-29. doi:10.1017/S0143814X00004918
- Seo, Ilwon, Anugerah Yuka Asmara, & Kwon, Ki-Seok (2021). From Knowledge Arbitrager to Policy Entrepreneur? Exploring the Role of Think Tank in the Open Innovation System. *Asian Journal of Innovation and Policy*, 10(3), 316-329.
- Sheller, M. & Urry, J. 2006. The New Mobilities Paradigm. *Environment and Planning A*, 38, 207-226.
- Silvestre, G., and G. Jajamovich. (2021) The Role of Mobile Policies in Coalition Building: The Barcelona Model as Coalition Magnet in Buenos Aires and Rio de Janeiro (1989–1996), *Urban Studies*, 58(11), 2310–2328.
- Temenos, C., & McCann, E. J. (2013). Geographies of Policy Mobilities. *Geography Compass*, 7(5), 344-357. doi:10.1111/gec3.12063
- Varró, K., and D. J. Bunders. (2020) Bringing Back the National to the Study of Globally Circulating Policy Ideas: ‘Actually Existing Smart Urbanism’ in Hungary and the Netherlands, *European Urban and Regional Studies*, 27(3), 209–226.
- Ward, K. (2011). Policies in Motion and in Place: The Case of Business Improvement Districts. In E. McCann & K. Ward (Eds.), *Mobile Urbanism: Cities and Policymaking in the Global Age* (pp. 26).
- Werner, P., & Strambach, S. (2018). Policy mobilities, territorial knowledge dynamics and the role of KIBS_ Exploring conceptual synergies of formerly discrete approaches. *Geoforum*, 89, 19-28. doi: 10.1016/j.geoforum.2017.12.007