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Forging Sustainable Health and Long-Term Care Systems: The Role of Solidarity

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Abstract

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Publicly-funded health and long-term care (LTC) systems have been under tremendous pressure to reform due to the increasing financial burdens derived from population aging, a stagnant economy, and the public's high expectations regarding advancing new technologies, medications, and quality care. Besides the institutional approach, another aspect of reform – that is, the solidarity shared by people in the health and LTC sectors – is also worth consideration. This dissertation aims to analyze the relationship between this solidarity and the development and sustainability of health and LTC systems. In the first chapter, the boundary problem and the related sustainability issue of the National Health Insurance system in Taiwan is used as a case to develop two possible ethical origins of solidarity: civic nationalism and ethos of common life. It is argued that ethos of common life is the more plausible alternative. The second chapter, using cross-sectional survey data, empirically examines the relationship between solidarity and Taiwanese people's support toward the health system. Adopting a comparative perspective, the third chapter focuses on the actual practice of solidarity – the scope of community, the scope of interdependence, and the costs of joint action – in health and LTC sectors in four East Asian countries: Japan, Korea, Taiwan, and Singapore. The differing solidarity reflects path dependency as well as historical legacies and policy diffusion between the health and LTC sectors in these countries. Centralization of governance is a prevailing feature in East Asia, allowing solidarity-based health systems to be established without the citizenry actually having any sense of solidarity in health care to demand that the government take action. Solidarity is a concept of which we should remain continually aware, if the arrangements in health and LTC in East Asia are to be made more broadly sustainable.

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INTRODUCTION

Publicly-funded health systems in developed countries have been under tremendous pressure to privatize and/or marketize since the late twentieth century, pressures which have intensified following the global financial crisis in 2008. Under ordinary circumstances, “good” (effective, efficient, quality, equity) design of institutional machinery is an important component to sustain such a public institution. But when a public institution faces severe crisis and recurrent attempts at reform fail to make progress, the members – the participants of the system – need to “entertain a public spirit” in order to sustain the stability of the institution toward its original policy goals. The first approach focuses on institutional machinery, while the second emphasizes civil society and public spirit (1).

These two different approaches might not necessarily be in conflict; nevertheless, the latter has often simply been taken for granted by researchers in the field of health and social policy. Scholars assumed that a certain degree of solidarity was automatically shared by the participants of the system. Solidarity was considered “a key element of the moral infrastructure of the modern welfare state” (2). The argument for solidarity is that it could motivate people to overcome their pure calculation of self-interests and risks in order to commit to bearing the costs of mutual assistance in a larger political community they recognize (3).

In the European context, this account of solidarity also can be viewed as incorporating the broad Judeo-Christian tradition as well as, later on, the legacies of labor movements and the social consequences of World War II (4). Solidarity has maintained the stability of social health insurance (SHI) in Europe, making it a “way of life” deeply embedded in civil society (5). However, this philosophical and social overview is not necessarily the case in a number of newly industrialized countries. For example, in East Asia, both South Korea and Taiwan have welfare

systems that were developed and expanded in the late twentieth century, accompanied by the process of democratization (6). The specific forms and sources of the solidarity that sustains these systems may be quite different from those experienced in Europe.

Solidarity and Public Policy

In the welfare state literature, there is a mutually reinforcing relationship between the stability of social policies and solidarity, or broader-speaking collective identity, in modern liberal democracies (**Figure 1**). On one hand, studies have shown that solidarity is an essential prerequisite to making social policies sustainable (7-14). Because of the redistributive nature of social policies, resources and property are collected by a public authority and distributed to defined population groups on a compulsory basis. There must be strong reasons to justify this redistribution, and the reasons must be collectively acceptable to survive public scrutiny. As Miller noted, “The welfare states...have always been national projects, justified on the basis that members of a community must protect one another and guarantee one another equal respect (p.187) (7).” In the modern sense, the agent of the public is often the nation-state. I call this relationship *solidarity to policy*.

On the other hand, studies have also shown that social policies are crucial means for a state to shape solidarity among its citizens (15-22), or are even classified as part of the tools of nation-building (23). Through the implementation and everyday practice of policies, people are convinced, either consciously or unconsciously, that they share a commitment to mutual assistance on the issue of concern. I call this relationship *policy to solidarity*.

The Case Study Method

Due to the complexity of the contexts and developmental paths of welfare systems in each country, it is difficult to clarify the effect and the direction of causality in this mutually reinforced relationship and to establish a general theory of the concept. In addition, the ideal of solidarity also faces constant tension against the reality of policy arrangements under external pressure (10). Nevertheless, for policymakers and researchers, it is necessary to take the role of solidarity into account and investigate its impact while planning, implementing, evaluating, and reforming their health systems. The analysis therefore must be conducted on a case-by-case basis, and there are certain well-developed works which have untangled the relationship between solidarity and health and social policies, such as Singh's case study of Kerala, India (13); Miguel's comparative study of Kenya and Tanzania (24); and Béland and Lecours's comparative study of Canada, the United Kingdom, and Belgium (21). In the first and second papers of this dissertation, Taiwan is the selected case. In Chapter 3, four East Asian countries – Taiwan, Japan, South Korea, and Singapore – are selected as cases. Because of the different levels of time and space within which scope of inquiry is placed in the three papers, beyond the general understanding of the mutually reinforcing relationship between solidarity and policy described above, each paper adopts a separate yet related conceptual framework specific to its research question.

Research Questions

Based on the literature discussed above, this study furthers the track of investigating the relationship between solidarity and the development and sustainability of health and long-term care policies within a historical and comparative perspective. In the first two parts, this study

focuses on publicly-funded systems that aim to provide services for health needs in Taiwan. The third part broadens the scope to include publicly-funded long-term care systems in Taiwan as well as in three other East Asian countries: Japan, South Korea, and Singapore. The study seeks to answer three questions:

1. What are the historical, political, and ethical origins of health sector solidarity in different historical periods in Taiwan?
2. What is the relationship between solidarity and public attitude toward Taiwan's health system in the twenty-first century?
3. What are the transitions of actual practices of solidarity in health and long-term care sectors among the four East Asian countries: Taiwan, Japan, South Korean, and Singapore? Why does solidarity form much later in the LTC sector than in the health sector, or even never form at all?

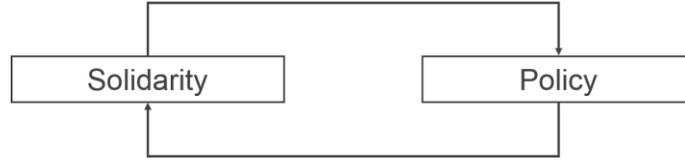


Figure 1. The mutually reinforcing relationship between solidarity and policy

CHAPTER 1: THE BOUNDARY PROBLEM AND THE ETHICAL ORIGINS OF HEALTH SECTOR SOLIDARITY IN TAIWAN

1.1 Background

The issue of the sustainability of publicly-funded health systems has long been one of the major political debates in developed countries, especially after the global economic recession in 2008. At the same time, the aging population keeps increasing the need for health care services and reducing the human resources available for care provision. In Europe, securing access to healthcare for refugees and/or economic migrants has become a challenging issue (25). In Sweden, for example, it is estimated that the funds redistributed for refugees' healthcare consumed 1% of GDP in 2007 (26). These external pressures not only threaten the financial sustainability of publicly-funded health systems, they also challenge the principle of solidarity, which is often considered the core value of these systems. Under these circumstances, policymakers must make difficult choices regarding the trade-offs between solidarity and public funding.

Besides the materialist demographic and economic dimensions, the heightened political tensions between and within borders have aroused a turbulent surge of identity politics, which further challenges the norm of solidarity and the redistributive scheme it sustains. In Europe, communities with different religious identities, for example Islam, challenge the principle of secular state through everyday life practices such as the wearing of hijab in public places and subordinating women's status (27). In East Asia, conflicting national identities and geopolitics also challenge the development of health systems. This non-materialist identity politics dimension affects the principle of solidarity in health. However, this dimension has not been

treated adequately in the policy literature. This study contributes to filling this gap by addressing the research puzzle: What is the role of solidarity to underpin these health systems under such circumstances?

The role of solidarity in modern health systems has a traditional character. In a classic/typical solidarity-based welfare state model, people's solidarity regarding health services is institutionalized because people share common values and commit to share health risks with each other; therefore, they hold the government accountable to build a health system to meet their expectations. In Europe, this sense of solidarity may stem from the legacies of labor movements, Judeo-Christian traditions, and nationalist sentiments in the Re-construction Era after WWII. In the East Asian context, however, health systems were built on a very different ground. They were established largely because the authoritarian rulers/governments wanted to suppress labor movements, secure adequate healthy labor supplies, or maintain their political legitimacy.

While health systems both in Europe and in East Asian countries are facing sustainability crises due to an aging population, stagnant economy, and changing boundaries, how those without a solidaristic ethical tradition can survive becomes both a matter of theoretical interest and an urgent policy problem to be addressed. Drawing on Prainsack and Buyx's analytic concept of solidarity (28) and Sangiovanni's normative account of solidarity (29), this study analyzes the case of the health system in Taiwan and proposes a supplemental account of solidarity that fits into the non-western societal and cultural context in East Asia. It supposes that solidarity is necessary to sustain the ideal that the health system, the National Health Insurance (NHI), intends to secure: that is, universal, equal, efficient, quality, and affordable access to health services for all Taiwanese citizens. The ethical origins of this sense of solidarity could

come from two notions: the re-emerged/forged civic nationalism, or an ethos of common life. This chapter considers the theoretical plausibility of these two sources, respectively, with the assistance of empirical evidence drawn from the literature and from selected real-life controversial events, official documents and announcements.

The plan of this chapter is as follows. First, I summarize the relationship between solidarity and the health system and provide a brief historical overview of Taiwan's specific context. I then present a case study on Taiwan's identity conflicts and the boundary problem of the NHI. I demonstrate that the identity conflicts and ill-defined boundary served to lower the public's trust in the NHI and eventually jeopardize its sustainability and stability. Third, the two ethical origins of solidarity are analyzed. I start by discussing the plausibility and limitations of civic nationalism as a source of solidarity. I then propose an alternative notion of ethos of common life and argue that it is more plausible than civic nationalism. Finally, I conclude with a discussion of the policy implications derived from the presented analysis.

1.2 Solidarity and Stability of Health Systems

In the Political Science literature, the concept has been referred to as we-ness, defined as 'a subjective feeling of belonging of a common polity' that can serve as "a driver of public goods provision and levels of social development" (12). In the Health Policy and Public Health Ethics literature, it has been referred to as solidarity. Besides the long history of viewing solidarity as a presumption of a redistributive health system (4, 9, 30), there is a burgeoning focus on the normative aspect of the notion of solidarity in public health ethics (22, 31-36). However, most of the analyses to date have been theoretical. In this paper, following the agenda proposed by Jennings (2015), we shall present a substantial case study on how the notion of solidarity is

practiced in everyday health policy-making.

The relationship between social policies and some forms of solidarity in modern liberal states has interested scholars from different disciplines. From a quick review of the issue in different scopes, we could depict a mutually reinforced relationship. On one hand, studies have indicated that solidarity is a prerequisite for the success of social policies (7-11). On the other hand, studies have shown that social policies are crucial means by which a state shapes solidarity among its citizens (13, 15, 17, 18, 20, 21), or even are classified as part of the tools of nation-building (23).¹

What is insightful here is that this mutually reinforcing relationship indicates that the identification of solidarity is a necessary element of the legitimacy of any redistributive publicly-funded health system. If people share solidarity in terms of the values of universal health care, they are likely to recognize and support the system in which the risks and obligations of care are shared between the rich and the poor, the young and the old, the healthy and the ill, the high-risk and the low-risk. No matter how much people disagree with one another's values or opinions in other perspectives, most of them would agree that healthcare needs are a matter of social responsibility, not just individual or family responsibility.

Various reasons may explain why people share solidarity. In the European context, solidarity might arise from the broad Judeo-Christian tradition or reconstruction sentiments in the Post-World War II era (4). The legacy of labor-capital conflicts is also a major explanation for the establishment of the welfare system (37). Solidarity could also arise from shared national identity (7), shared familial values (38), shared belief in universal human rights (39), shared belief in health rights protected by the constitution, and shared belief in the fair equality of

¹ This part has already been presented in the Introduction section of this dissertation. For the purpose of writing this chapter as an independence essay, this review is presented here again.

opportunity for each citizen (40), among others. In short, solidarity in different societies may have specific origins depending on the historical and cultural contexts. Despite these divergent identities and values upheld by the citizens, they meet consensus around supporting a publicly-funded health system as the institution to secure universal access to healthcare and redistribution of health services between the haves and the have-nots. In such a scenario, the citizens are taken to share a sense of solidarity in regard to their common health needs.

Drawing on Prainsack and Buyx's account, solidarity in this study is defined in a descriptive sense, that is, "an enacted commitment to carry 'costs' (financial, social, emotional or otherwise) to assist others with whom a person or persons recognize similarity in a relevant respect" (p.52)(28). In a health system, the relevant respect is equal access to healthcare, and the costs are the taxes or premiums that are collected coercively by public authorities. Then the community to which the "others" to be assisted belong must be identified. In a general sense, the community is a political community, or a nation-state, the term with which we are more familiar today. This community, however, is quite controversial – both conceptually and practically.

Conceptually, why do the members of the community feel these obligations to care about each other's financial needs for healthcare services just because they happen to be the members of the same community? It is often assumed that the compulsory intervention is justifiable because there are some forms of solidarity, such as a sense of belonging and commonality between members, that make people willing to take each other's needs into account and commit to them. Ideally, solidarity should be identified among the individuals who participate in a publicly-funded health system, so the system may collect and redistribute the resources legitimately.

The problem arises in determining the boundary of this solidarity, and hence determining

the boundary of the community that is entitled to the services covered by the system. This notion is the “solidarity with whom?” addressed by Prainsack and Buyx (28). There must be some criteria to justify this decision. I call these the “inclusion criteria” of entitlement to a publicly-funded health system. Practically, these criteria must be applicable, so that bureaucrats may determine the entitlement status of any individual accordingly during the administration process. One may be tempted to use citizenship as the inclusion criterion, which is of course a plausible and widely-practiced option indeed (41). However, this criterion still must be justified. Public deliberations and reasons are required to make explicit decisions. This process is exactly what the NHI in Taiwan lacks, and the main reason why it has always been controversial. Before entering into the boundary problem of Taiwan’s health system, I first introduce the context in which the problem is grounded.

The Relationship between Solidarity and Health System in Taiwan

In the specific context in Taiwan, the relationships between solidarity and the development of the health system are complex. Both the *solidarity to policy* and the *policy to solidarity* relationship are found. Below I show the relationship between nationalist sentiments and the development of the Taiwanese health system across four historical periods, and how the re-emergent Civic Nationalism (42, 43) could be a possible source of solidarity to forge future reforms of NHI. This approach has received little attention from scholars of the welfare system in Taiwan. They have mostly focused on either modernization theory (6, 44-46), the historical institutionalism approach (47-49), or the political will of authoritarian political leaders (50). Therefore, it would be especially useful to reevaluate the development of the health system through the lens of nationalism – the pursuit of self-determination for a common future. Different

forms of nationalism are sources of solidarity in Taiwan. They have constructed different relationships to the health system in different historical periods (**Table 1**).²

(1) Colonial Period (1895-1989)

In the Japanese Empire Colonial Period (1895-1945) and the Chinese Nationalist Party Colonial Period (1945-1989), the health system functioned as a stabilizer of social unrest and further established the political legitimacy of the ruling entities. The causal relationship, if any, would be *policy to solidarity*, meaning that the design and implementation of an effective health system, joining other social policies, formed a material base for the political authorities' nation-building construction. Before 1945, Taiwanese were taught to be Japanese. After 1945, Taiwanese were taught to be Chinese. These two nation-building attempts were largely successful, from an *ex facto* viewpoint, in forming the ethnic/essentialist Japanese and Chinese nationalism, respectively.

(2) Post-Cold War Neoliberalism Period (1990-2004)

Later on, in the Post-Cold War period, the relationship became ambiguous due to the rapidly changing international dynamics, in which some *policy to solidarity* causal effects remained while the opposite *solidarity to policy* direction was also forming. The prevailing ethnic Chinese nationalism started to localize and dissolve in the process of democratization after the period of Martial Law was lifted. Organizing new parties, electing new representatives from Taiwan's

² The three historical periods are derived from the categories developed by political scientist Rwei-Ren Wu: (1) Colonial Period (1895-1989), (2) Post-Cold War Neoliberalism Period (1990-2004), and (3) the Rise of China and New Imperialism Period (2005-present)(**Table 1**)51. Wu R-R. Promethous Unbound: When Formosa Reclaims the World. New Taipei City: Acropolis; 2016.. When Wu uses this framework to analyze the development of Taiwanese nationalism, I take advantage of its power to explain the relationship between nationalism, capitalism, and globalization, and further engage it with the development of the health system.

territory, and amending the Constitution with these new representatives, were all movements driven by people's pursuit of freedom and self-determination. Behind this pursuit was a national sentiment that Taiwanese have to collectively fight for a common future, including how the people were going to arrange their collective responsibility of care for their fellow citizens. Under these circumstances, the health system on one hand expanded in terms of reallocation of public resources and securing of universal access to health services, while on the other hand the public sector retreated from care provision and the private sector dominated due to then-current neo-liberalist logic. Thus the result of democratization for the Taiwanese health system was the establishment of social health insurance – the NHI.

(3) Rise of China and New Imperialism Period (2005-present)

In this period, the People's Republic of China (PRC) seemed to become more impatient about the "Taiwan Issue" as its political and economic power grew. Externally, in 2005, China passed the *Anti-Secession Law*, which explicitly states the three conditions under which China would take military action to invade and seize Taiwan. Internally, the conflict of national identities had come to a new high ground. On one hand, the Ma Ying-Jeou Administration from 2008 to 2016 had brought Taiwan into deep economic connection with China and trapped Taiwan within the politics of China's "One-China Policy." On the other hand, the bottom-up unrest of Taiwanese identity supporters accumulated and eventually caused the Sunflower Movement (52, 53) and the "outbreak of Taiwan's civic nationalism" (43) in 2014. In the midst of this political tension, the NHI also met with severe financial crises and experienced a major reform in 2010. Considering the complexity of the identity issue and external pressures, the top-down 'policy to solidarity' direction would no longer be available in this period. If Taiwanese were to continually

forge a sustainable health system, they would have to count on the ‘solidarity to policy’ direction.

Through this brief overview of the developmental trajectory of the Taiwanese health system and its relationship with solidarity, several observations could be made. First, Taiwanese clearly have conflicting national identities formed from the multiple colonial governances in the past three generations. This conflict affects how people see the political community and the presumptions they make when thinking about public policies and decision-making in the current democratic governance. Second, the publicly-funded health system was forged for different purposes in different historical periods. In the colonial period, the health system was used as a means to establish solidarity largely for the purpose of nation-building. Japanese wanted to transform underdeveloped and barbarian Taiwanese dwellers into modernized citizens of the Japanese Empire (*komin*, the people of the Emperor of Japan). Later, under the KMTC’s authoritarian rule, Chinese wanted to transform Taiwanese again from Japanese citizens into Chinese citizens (KMTC claimed that Taiwan was “Liberal China” at the time). After the death of the dictator as gradual democratization was taking place, the sense of solidarity finally started to emerge from the bottom to the top. On one hand, the vigorous civil society demanded that the state should take care of the health needs of all citizens; on the other hand, parties started to compete for political support from the people. The universal coverage of the NHI was established as a response to these demands. Third, despite the lack of an explicit sense of solidarity, the NHI has survived through several financial crises. The general public seems to support the NHI, while also remaining well aware of the financial crises the NHI has been through.

In short, the conflicting national identities, the dynamic relationship between the health system and solidarity, and the fact that the NHI has survived form the context within which the boundary problem is situated.

1.3 The Boundary Problem of Solidarity in Taiwan's NHI

The NHI is a compulsory redistributive social insurance system that collects funding from payroll premiums and provides universal coverage to the whole community (54, 55). Since its implementation in 1995, the NHI maintains a rather high public satisfaction rate of around 80% (56). Despite the system's (relatively) good performance and overall satisfaction, due to the vagueness of the boundary of the community, it has suffered from criticism and distrust among Taiwanese citizens. Examples include whether foreigners who study or work in Taiwan, citizens of People's Republic of China (PRC), and overseas Taiwanese (or overseas Chinese³) should be included in the community, and whether some sub-groups of Taiwanese citizens should be excluded from the community. I call these sub-populations the "populations at the margins." Recent debates related to these populations on the issue are listed in **Table 2**. Each time an indicative case has occurred, the public's resentment was aroused and the NHI fell under furious attack from public opinion. Under these circumstances, the boundary of solidarity was neither well-defined nor justified, and the legitimacy of NHI decreased.

Why is the boundary problem so important to the legitimacy of NHI? Consider the scenario below. From the perspective of a community member of NHI, he or she would see 'others' according to the following rationale:

³ Here I specifically refer to those Chinese who consider themselves as the decedents of the Republic of China (ROC), not the People's Republic of China (PRC).

You do not belong to our community. Your needs for healthcare services are your own responsibility, and ours are our own concern. I, as a person, might feel sorry for your illness, your sufferings, and your losses due to the financial burden of care. I might feel like helping you out of sympathy, and I might take individual action to help you. But these actions are based on my personal values and preferences. I do not have any obligation to you, nor do my fellow members of the community. If you join and become a member of our community one day, there might be two possible reasons. One would be because you somehow start to share solidarity with us; hence you start to have the rights and the obligations of a member. We are bound together on the basis of sharing costs of healthcare services. The other would be because somehow the political authority that operates the NHI system forces us to consider you as a member, and forces us to be bound together on the basis of sharing costs of healthcare services. Consequently, we are shaken by the suspicion: Is this NHI the ‘authentic NHI’ that we hoped to implement to achieve the values that we cherish?⁴

If the legitimacy of the NHI were loosened, the public’s confidence in the system would decrease, and the stability and sustainability of the system would be jeopardized. This claim appears bold at first glance. Indeed, as the government often mentions, the number of the controversial cases that are related to the boundary of the community is relatively small in comparison with the total resources of the NHI fund. On the books, the spending and potential deficits are largely due to other factors, such as demographic transition, the stagnation of the economy, and the introduction of new treatments and advanced technologies into the service package. One may also rightly argue that there are many factors contributing to the citizenry’s evaluation of and confidence in the NHI structure.

⁴ Note that this is a hypothetical scenario constructed by the author, not a quotation from an interview.

These are valid arguments. However, one should recognize that the loosened legitimacy can be an important factor leading people to negatively evaluate the performance of the system and the trustworthiness of the operating authority, namely the government. If people are forced to be bound with those whom they perceive as ‘strangers’ and even ‘enemies’ and to share costs of healthcare services with them, they are likely to consider the NHI as a dubious and alien institution.⁵ If people thought that the NHI had deviated from the original idea of the institution and could not put the values they cherish into practice, they would not provide their support if the system were to face vital crises and if difficult choices needed to be made. Hence, future generations would be unable to have “whatever it takes to achieve a standard of living at least as good as our own and to look after their next generation similarly” (57) in terms of healthcare services under the scheme of NHI. In short, even if the NHI remained in some form after several reforms in the future, the lack of legitimacy would make it impossible to maintain its original policy purpose. In this sense, the legitimacy of the system would decline and the NHI would no longer be the NHI it once was.

From this analysis, before confronting legitimacy problems, we need first to ask: Who are we? Why do we have shared obligations of care to each other? To what extent do we commit to share the burdens, even we have to sacrifice part of our own welfare? The answers to these questions constitute the solidarity which binds the community and is necessary to maintain the legitimacy of the NHI.

⁵ I use the term ‘enemies’ here purposefully. It is actually an issue at the very core of conflicts in Taiwanese society that some groups of population are often considered as the nation’s enemies. Note that the ‘nation’ and its ‘enemies’ could be defined in various ways. To name a few: Taiwanese had defined those with Chinese identity as enemies. Chinese had defined those with Taiwanese identity as enemies. Chinese had defined those with ROC identity as enemies. ROC believers had defined those with Taiwanese identity as enemies. There are more combinations. I am not suggesting that these de facto definitions are justifiable, but rather, I am suggesting that even though they are dynamic and subject to change under the international relationship and the attitudes of Beijing and Taipei, they should be taken into account seriously by those who care about the future of the NHI.

1.4 Two Possible Ethical Origins of Health Sector Solidarity

Now that the historical and political origins of solidarity and the boundary problem have been analyzed, what ethical origins of solidarity could fit into this specific context of Taiwan and address the boundary problem? There are two possible ethical sources that one could consider. One is civic nationalism, which could combine the conflicting national identities that currently exist. However, this source has certain limitations. The other is an “ethos of common life” that has been forged and reforged through the policy practices of the NHI over recent years (from 1995 until now). This account of solidarity was developed together by myself and a research fellow, Dr. Chia-Ming Chen, at Academia Sinica in Taiwan. I will demonstrate that compared to civic nationalism, the ethos of common life is more pragmatic and system-specific, and is therefore a better ethical source to address the boundary problem of health sector solidarity in Taiwan.

Civic Nationalism

The notion of civic nationalism would be a plausible version of ethical judgments that fit this framework. In the previous sections, I have shown the importance of the legitimacy of the NHI and its relationship with the solidarity shared between members of the community. Here I propose that a specific form of Taiwanese nationalism that has re-emerged in Taiwan in recent years could serve as the ethical underpinning of solidarity. Taiwanese nationalism has been developed across a long time period, starting even before the democratization process began in 1980s Taiwan. There were many versions of Taiwanese nationalism, with different sets of ethical principles. One of these is called civic nationalism.

From the history of political thought, this version of nationalism could be considered a

branch of broad liberal nationalism thinking that first emerged in the local elites' advocacy for parliamentary institutions in Taiwan during the colonial rule of the Empire of Japan. After WWII, during the colonial rule of the Chinese Nationalist Party (or the Kuomintang of China, KMTC), these thoughts were relentlessly suppressed and many local elites were 'pacified.' However, some maintained their advocacy either overseas or underground. In 1964, Peng Ming-min, a professor in political science, co-authored the *Declaration of Formosan Self-salvation* with his two graduate students, asking the two subgroups in Taiwanese society – the mainlanders and the locals – to put aside their ethnic national identities and collaborate together to strive against the worsening international condition of the country. This event marked the seed of the idea of civic nationalism in Taiwan (58). Due to the political climate at that time, the effects seemed short-lived. After the announcement of the *Declaration*, Peng was listed as Taiwan's most wanted and forced to escape to Sweden and later the US.

It was the People's Republic of China's efforts to isolate Taiwan from global society in the late twentieth and early twenty-first century that revived civic nationalism. After democratization, the younger generations in Taiwan gradually grew up under the loosened authoritarian control of the social and political environments. In the meantime, China's political and economic powers have grown rapidly. China has a significant influence on other countries' decisions regarding interaction with Taiwan. Under these circumstances, more Taiwanese realize their common fate and the necessity to stand together to struggle for survival. This geopolitical structure constitutes the soil within which civic nationalism can grow (43). However, not until recent political movements did the term attract the public's attention and become powerful language against the previously dominant Chinese identity interpreted by the KMTC and the Communist Party of China (CPC) across the strait. I take this re-emerging Taiwanese civic nationalism to be a

plausible ethical underpinning of solidarity.

Civic nationalism emphasizes the experiences of common miseries under oppression, the common fate of a community that has to struggle against oppression, and most importantly the values shared by the community (e.g. democracy, liberty, and human rights). The civic nationalist movement would invite citizens with different ethnic identities, regardless of whether one's self identification is Taiwanese, Chinese, Chinese Taiwanese, or Taiwanese Chinese, to uphold these values to live together, stand aside together, and stand for each other together to change and shape the common future as one "civic nation." This notion of civic nationalism is specifically meaningful in contrast with the notion of ethnic nationalism, which depends on the same origins of blood, lineage, language, religion, or mysterious and untraceable common national history.

In Taiwan's context, the subjective belief in certain core values developed through common experiences is crucial and connected with the re-emerging civic nationalism. As Wu noted, Taiwanese residents' common experiences, including their struggles against the authoritarian government and international oppression from China and struggles for the common well-being and self-determination at the edge of Empires, had made them tentatively put aside their national identities and merge into one new political community with a new, forward-looking identity (58). This new identity is both national and civic, representing a totally different way of life which is preferable and inclusive to any identities, as long as people acknowledge their common fate and agree to live together.

This version of nationalism has certain advantages for overall solidarity. It is not only idealistic but also realistic, in that it does not require people to abandon their own identities in terms of nation, gender, religion, or occupation/profession, but rather includes any people who

uphold similar values and wish to live together. On the other hand, it leans more toward the “solidarity as joint action” thesis (29) than toward traditional ethnic or official nationalism. It could hence avoid the latter’s vices, about which many liberals are often concerned. This element connects the ethical principle of civic nationalism with our discussion on defining the boundary of the NHI community. If Taiwanese were to share the obligations of healthcare with the community members defined by their levels of solidarity, they could define the boundary by examining whether these values are upheld by the populations at the margin, and the primary population’s willingness to take joint action with them. The purpose is to preserve the way of life they cherish and commit to reciprocity in the long run. By participating in the NHI, together Taiwanese citizens and the populations at the margin could cover each other’s health needs through the health system. Then the boundary problem would be solved, and the NHI would be supported by a genuine solidarity.

However, using civic nationalism as an ethical source for health sector solidarity encounters several limitations that undermine its applicability. First, despite the civic nationalism re-emerging recently, its influence is still very much subject to the dynamic geopolitics into which Taiwan fits, namely the multilateral relationships between Taiwan, China, and the United States. Compared to the institutional stability that would be requested by a publicly-funded health system, the geopolitics change on a yearly basis. Second, civic nationalism still encounters the problem of resolving the existing conflicting national identities. Given the amplified voices from the extremists or fundamentalists on both sides of Taiwanese and Chinese identity, the values and ideals to which civic nationalism appeals could be easily neglected or dissolved amid their quarrels. Third, related to the previous two problems, civic nationalism could be confounded with too many factors that are not directly related to health needs and the health

system. For example, the conservative results of the national referendums held in November 2018 (together with the general election of city and county mayors and representatives) reveal that the re-emergent civic nationalism in the past decade is now being repressed. However, it is unclear whether these results will affect people's willingness to share the financial costs of health needs. In sum, civic nationalism as an ethical origin of solidarity suffers from a lack of specificity to health. This major limitation could be better addressed by an alternative.

Ethos of Common Life

From the relatively good performance of the NHI in Taiwan and high public satisfaction rates throughout the years, one could reasonably infer that the NHI represents a rather successful, or at least acceptable, health system to Taiwanese residents. The findings of previous studies also show that some Taiwanese are able to justify and support the NHI through the notion of solidarity (59), as defined by Prainsack and Buyx (28). How this sort of solidarity develops can be inferred from the Taiwanese experience: it has been shaped by 23 years of relatively successful implementation. I call this origin of solidarity the "ethos of common life." Below I describe how this concept was developed.

In modern society, people live their lives together through the support of various kinds of public systems on a daily basis. Examples include public education, public transportation, police and fire department services, pension systems, road and highway maintenance, national park service, and notably health and long-term care systems. All these public systems are financed through contributions, either of taxes or premiums, made collectively by the people. Therefore, people actually all consent to participate in the cost-sharing arrangements to meet all kinds of needs, which are also shared by the people together. This fact of *common life* would then convey

the ideals and values upheld to the people by these public systems.

The health system in Taiwan serves as a good example. Through daily activities of participation, such as paying their premiums, keeping the NHI insurance card in their wallets, and seeing a doctor whenever needed, people are not only habituated to this way of life, but also start to internalize the values inherent in all these activities – the values of equal access to health services that are affordable, efficient, and high-quality. These values are the ideals and original purposes of the NHI system, and now they also gradually become the values upheld by NHI users as the users become more attached to the system. This value-laden sentiment derived from the habituation of or attachment to the system can be extracted into an abstract and normative form, which is the *ethos of common life* of the health system.

After years of implementation, the NHI might shape the people's habits and social values and eventually form an ethos of common life between people. The formation of ethos of common life is the result of the common experience of joint actions taken to share health risks among Taiwanese residents. This, on one hand, is an observable empirical phenomenon; on the other hand, this ethos of common life could become the ethical source of solidarity in non-western societies and help these health systems endure their prolonged sustainability crises.

The ethos of common life has several advantages that make it a better ethical source of solidarity than civic nationalism. First, it is derived from the solid ground of solidarity – the shared actions and common experiences, as Sangiovanni argues (29). This fact of common life under the same health system binds people together, with a certain level of their consent, making people taking joint actions on a daily basis with regard to health affairs. These shared actions lay the groundwork of solidarity. As long as people find the values and ideals upheld by the NHI reasonable and acceptable and continue to act jointly, they will forge stronger solidarity, which in

turn further strengthens their internalization of the values and ideals of the health system and the reciprocity between each other.

Second, related to the first point, the ethos of common life is forged through the implementation of a policy; therefore, it is specific to that policy. This feature makes the ethos of common life better fit the health system and the context within which it is grounded. In Taiwan, there was a weak labor movement, a relatively small proportion of Judeo-Christian religious population (about 6%, including all Christian factions), and conflicting national sentiments derived from the multiple colonial periods. The major social ethics of Taiwanese society is Confucian, which traditionally puts the responsibility of care mostly on the family. None of these factors alone could possibly constitute the ethical origin of health sector solidarity. Despite these constraints, Taiwan managed to adopt a modernized social health insurance system. As analyzed, the civic nationalism that has re-emerged in recent years might be a plausible source of solidarity, but its lack of specificity is a major limitation. Suppose Taiwanese people really do have a strong civic nationalist sentiment; what values and ideals with regard to health and what type of health system would they support? These values and ideals are still subject to the social and cultural context. The ethos of common life is different. Since it is derived from the implementation of a specific health system, the NHI for example, the solidarity forged by the ethos of common life would by definition be embedded with the values and ideals upheld by the NHI. Thus the ethos of common life overcomes the major limitation of civic nationalism.

Third, therefore, the ethos of common life is more pragmatic than other ethical origins, including civic nationalism. Regardless of existing conflicting national identities, liberal-conservative stances on other social issues, cultural traditions, or even different religious beliefs, all Taiwanese residents live together under the everyday implementation of the NHI.

Participating in the NHI does not require any precondition of a specific value system. The only condition required is the existence of a formal publicly-funded health system that functions relatively well or acceptably. In Taiwan's case, the NHI was established due to several factors that may be unrelated to solidarity in health, but as long as the NHI itself performs well, the ethos of common life is plausible. Likewise, for other countries with newly-developed publicly-funded health systems and with diverse social, political, and cultural norms and values, the ethos of common life could be a plausible ethical origin of solidarity.

In sum, the ethos of common life is a pragmatic, system-specific ethical origin of solidarity that is grounded in the shared actions taken by the users of the health system. It is inclusive in the sense that all those acting jointly could be included within the boundaries of solidarity. Therefore, this explanation better tackles the "solidarity with whom" question. For example, the population at the margins presented in the previous section could be included in the health system, if they are willing to uphold the values and ideals and take actions together with the current users of the NHI.

1.5 Discussion

In the era of new risks and an aging population, the NHI in Taiwan and its counterparts in other developed countries have faced several crises in the past twenty years, and can expect more in the foreseeable future. In this chapter, I have illustrated that the historical and political origins of solidarity show that the direction of the relationship between solidarity and policy has reached a new and vague stage in this era. I also have argued that the boundary problem of solidarity should be considered seriously if we are to maintain the stability and sustainability of the NHI and the ways of life, values, and ideals it upholds. I do not suggest that if solidarity and the

boundary problem had been well-defined, the sustainability issue would be solved once and for all. Many other factors contribute to the sustainability of the NHI. However, the existence of solidarity supplies one of the necessary answers to the question: who should be entitled to the NHI? This question eventually leads to the first and ultimate question of interest in our field of public health: “What kind of the community do we want?” (p. 29)(35). I analyze two plausible ethical origins of solidarity that might fit Taiwan’s context, and argue that the ethos of common life is a better alternative than civic nationalism to address the boundary problem.

A person’s specific identity in a single given time and space is objective. She might be a woman, an engineer, a member of the Lions Club, a Muslim, a feminist, and a US citizen. He might be a man, a teacher, an atheist, and a PRC citizen. However, the criteria and process that include him or her in the NHI community are political. This issue is, on one hand, the core definition of social health insurance; and on the other hand the controversial problem of national identity in Taiwan. The latter problem might be gradually solved given enough time and wisdom accumulated through increased interactions among people, but the practices of the NHI must be conducted on a daily basis and cannot be postponed for an unlimited duration. As noted, solidarity is the foundation for ethics and policy debates and decision-making (36). Therefore, policy researchers and policymakers should recognize the importance of normative ethical justification of the NHI’s inclusion criteria, making the system more legitimate and sustainable by clarifying the boundary of the community it comprises. The boundary problem of health sector solidarity should be considered seriously by those who are concerned about the future of the NHI and should be placed on the reform agenda, since it is the most pragmatic way in which solidarity is put into practice.

Table 1. The historical periods and major political events in Taiwan

Historical Periods	Political events
The Colonial Period – Japan (1895-1951)	1895 The Treaty of Shimonoseki 1945 The end of WWII 1950 Korean War and the formation of Cold War order
The Colonial Period – China (1951-1989)	1951 The Treaty of Peace with Japan 1987 The end of Martial law 1989 Tiananmen Square protests (aka. 64 Incident)
The Post-Cold War Neoliberalism Period (1990-2004)	1990 Wild Lily student movement 1992 The general election of representatives 1996 The general election of president 2000 The 1st party alternation 2002 Taiwan became WTO member
The Rise of China and New Imperialism Period (2005-)	2005 The enactment of Anti-Secession Law 2008 The 2nd party alternation The Chen Yunlin Expedition (ref. Perry Expedition) 2014 Sunflower movement

Source: The historical periods are adapted from Wu’s categorization (51). The major political events are summarized by the author.

Table 2. Recent Debates about the Insurance Status of Populations at the Margin

Populations at the Margin	Current NHI-membership Regulations*
The foreigners who study, work, or live in Taiwan	<ol style="list-style-type: none"> 1. Workers must participate in the NHI, contributing 30% of the premium (the other 60% is contributed by the employers; 10% by the Gov). 2. Students must participate in the NHI, contributing 60% of the premium (the other 40% is contributed by the Gov), if they have stayed in Taiwan longer than 6 months. 3. Spouses must participate in the NHI as dependents, contributing 30% of the premium (the other 60% is contributed by the insured’s employers; 10% by the Gov), if they have stayed in Taiwan longer than 6 months.
The citizens of People’s Republic of China (PRC) who study, work, or live in Taiwan	<ol style="list-style-type: none"> 1. PRC citizens are not allowed to work in Taiwan. Exemptions: <ul style="list-style-type: none"> ● Exchange professionals are allowed to work, and they must participate in the NHI, contributing 60% of the premium (the other 40% is contributed by the Gov), if they have stayed in Taiwan longer than 6 months <i>(Regulations Governing People of the Mainland Area Entering Taiwan Area).</i> 2. Students cannot participate in the NHI. 3. Spouses must participate in the NHI as dependents, contributing 30% of the premium (the other 60% is contributed by the insured’s employers; 10% by the Gov), if they have stayed in Taiwan longer than 6 months.

(Act Governing Relations between the People of the Taiwan Area and the Mainland Area)

Sub-groups of the foreigners (e.g. foreign fishery employees)	Foreign fishery employees must participate in the NHI, contributing 30% of the premium (the other 60% is contributed by the employers; 10% by the Gov), but the dues contribution happening between 01/01/2009 to 01/22/2015 should be waived. <i>(The Fisheries Act, Article 69-2)</i>
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The overseas Taiwanese who study, work, or live in Taiwan	<ol style="list-style-type: none">1. Those without household registration:<ul style="list-style-type: none">● Workers must participate in the NHI, contributing 30% of the premium (the other 60% is contributed by the employers; 10% by the Gov).● Students must participate in the NHI, contributing 60% of the premium (the other 40% is contributed by the Gov), if they have stayed in Taiwan longer than 6 months.2. Those with household registration: Must participate in the NHI.3. Those with restored household registration: Must participate in the NHI, if they have restored their household registration longer than 6 months. <i>(Household Registration Act)</i>
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Sub-groups of Taiwanese citizens (e.g. domestic fishery)	Must participate in the NHI, contributing 30% of the premium (the other 60% is contributed by the employers; 10% by the Gov).
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employees)

Note: This table is prepared by the author. *If not otherwise noted with italics, the regulations displayed in the table are derived from to *National Health Insurance Act*, Article 9 and Article 10. All the other regulations are cited from the Laws and Regulations Database. Website: <http://law.moj.gov.tw/Eng/>.

CHAPTER 2: SOLIDARITY AND PUBLIC ATTITUDE TOWARD THE HEALTH SYSTEM IN TAIWAN

2.1 Background

In this second part of my dissertation, I use quantitative evidence to supplement the historical argument about the relationship between solidarity and development of the health system in Taiwan. Drawing from Singh's explanatory model of solidarity and social development (13), this section aims to examine the association between citizens' sense of solidarity and the health system's sustainability. Citizens' attitude toward the health system is used as a proxy for the notion of sustainability. It is assumed that having a supportive attitude toward the health system is a minimal requirement for people to take joint action, either through a bottom-up popular political mobilization approach or a top-down elitist lobbying-legislative approach (13), to make the health system more sustainable by holding the government accountable and making necessary reforms. Whether this assumption remains valid is subject to empirical examination. In addition, I will investigate the moderating effects of two factors – perceived health system performance and birth generation – in the relationship between solidarity and public attitude.

2.2 Conceptual Framework

To examine the association between individuals' sense of solidarity and their attitude toward the health system, a conceptual framework has been derived from Singh's model (13) (**Figure 1**). In the original model, solidarity is measured by a scale of subnationalism at the population level (provinces of India), while in my revised version, I use social trust, social support, associational life, judgment of fairness in health and education, and social attribution of illness to measure an

individual-level sense of solidarity. Supportive attitude toward the publicly-funded health system is measured by respondents' willingness to pay more money to enhance the overall quality of care provided by the system, recognition of the right to healthcare, and value judgments regarding what government's role should be in healthcare provision.

The focal relationship

In the focal relationship, sense of solidarity is the independent variable (IV) and holding a supportive attitude toward publicly-funded health systems is the dependent variable (DV). It is expected that there is a positive association between the IV and the DV. The major mediator is the individual's willingness to share health-related financial risks with other members of the society. The mechanism is that if an individual has a stronger sense of solidarity, s/he would have more affective attachment to and sense of belonging with others, whose well-being and miseries due to unaffordability of health services are relevant issues to the individual (7, 29). Hence, in order to relieve others' miseries, one would be willing to support a social arrangement scheme such as a publicly-funded health system. However, this factor is not measured in the survey (the dotted box in **Figure 1**).

The moderators

One possible moderating factor is how the individual perceives the performance of the health system. The sense of solidarity would relate to supportive attitudes toward the NHI under the condition that the individual sees the NHI as an effective, well-performing system. If the NHI is ineffective in a person's eyes, no matter how strong a sense of solidarity the person may have, s/he would not support the NHI because his/her perception would be that the organization cannot

provide health services even if the health-related financial risks were pooled between community members. Therefore, it is expected that the presence of positive perceptions of health system performance is a condition of the presence of the focal relationship.

Another possible moderating factor is the individual citizens' experience engaging with the health system. If they have had medical experiences such as severe illnesses requiring intensive care, they would have engaged with and benefited from the publicly-funded health system. According to previous studies, these people are better able to appreciate the value of the system (59). Hence, it is expected that the presence of these positive experiences will also be a condition for the presence of the focal relationship.

The confounding variables

Socio-economic status, including education level, household income level, gender, and age cohort, will be taken into consideration as confounding variables. These variables are related to both the IV and the DV of the focal relationship.

2.3 Hypotheses

The major hypothesis to be tested is:

H1: Those with and without solidarity have different attitudes toward positive support of the publicly-funded health system.

As shown in the focal relationship, those people with a sense of solidarity will have

supportive attitudes toward the collective pooling of funds through a nationally financed health system, while those without solidarity will not have this attitude. However, there are possibilities that this relationship will be moderated by the respondents' perceived health system performance and their experience engaging with the health system. Therefore, two further hypotheses can be defined:

H2: A positive relationship between sense of solidarity and positive attitudes toward the health system is present or is magnified when people have positive perceived performance of the health system.

H3: The relationship between solidarity and attitudes toward the health system is presented or is magnified when people have experience engaging with the health system.

2.4 Materials

The data source is the Taiwan Social Chang Survey (TSCS), which is a cross-sectional, national representative survey conducted since 1984. The sampled population includes Taiwanese citizens with household registration (which is very common for ordinary citizens) on Taiwan Island and aged 18 or above. The citizens who serve in the military, live on offshore islands, or are current residents of hospitals, mental institutions, boarding schools, job training centers, dorms, or correctional institutions are excluded. The dataset is publicly available and may be accessed for free. This study uses data from the TSCS Round 6 Year 2 (Topic: Family and Health) survey, which was conducted from July 17 to August 28, 2011. The sample size is 2199. The adjusted-response rate is 60%. For this survey 110 interviewers were recruited to

conduct the personal household survey. Computer Assisted Personal Interviewing was used throughout the interview process (60).

2.5 Methods

Measurement

The concept of solidarity is related with five items in the TSCS questionnaire, including social trust, social support, associational life, judgment of fairness in health and education, and social attribution of illness. These five dimensions of respondents' evaluations of their relationship with other members of the society reflect their connectedness with others, and are expected to be related to sense of solidarity. However, after applying a factor analysis, only two items are identified as relevant to the concept of solidarity. One is social trust; the other is the judgment of fairness. Considering that the fairness judgment item actually has different meanings than the concept of solidarity in the health sector per se, I use social trust alone as the proxy for solidarity.

Supportive attitude toward the health system, the dependent variable, is conceptualized as a person's recognition of the government's positive role in the publicly-funded health system, and his/her willingness to further support the publicly-funded health system. This variable is operationalized by two items: support for more investment to enhance the overall quality of services financed by the NHI, and the government's role in health provision.

One moderator, perceived health system performance, is operationalized by two items: the perceived effectiveness of the system ("In general, the health care system in Taiwan is inefficient.") and the prospective evaluation of the system ("In the next few years, the health care system in Taiwan will improve."). The other moderator is the respondents' experience engaging

with the health system. This factor is measured by one item assessing the respondents' objective experience: "In the past 12 months, have you been in hospital or a clinic as an inpatient overnight?" This item is chosen because it represents the severity of the respondents' illness to the extent that he/she required inpatient care, and hence would have more intensive engagement with the health system.

Confounding variables include education level, household income level, gender, and age cohort.⁶ Education level is categorized into two groups, high (college or university and above) and low (junior college and below). Household income is categorized into high (80,000 to 90,000 NTD per month and above) and low (70,000 to 80,000 NTD per month and below) two groups. Gender is categorized into female or male. Age cohort is categorized into younger cohort (below 60 years old) and older cohort (60 years old and above).

Analytic Strategy

Besides basic information and social demographic items, most of the items in the survey are primarily measured in 4-point or 5-point Likert scales, including all the items used as proxies for the dependent and independent variables. For the purpose of analysis, these ordinal variables are coded as binary variables (agree/not agree, positive/negative, yes/no, etc.).⁷ Chi-square tests are used as the major statistical strategy to examine the attitude differences between those with and

⁶ Originally, birth generation is defined by the NHI generation. The respondent who was born after 1983 is categorized as NHI generation. However, the preliminary analyses showed that this distinction of cohorts does not generate different results. On the other hand, it is found that two age cohorts divided by 60 years old, younger (<60) and older cohorts (>=60), have different results. Therefore, age cohort is reconsidered as a confounding variable, not as a moderator.

⁷ In the beginning of my analysis, I combined these ordinal items together, adding the scores to generate continuous dependent and independent variables. I also used these continuous items to conduct the factor analysis to determine which items are to be used as proxies for the dependent and independent variables. I did not use these ordinal items to conduct regression analysis. Instead, I coded these ordinal items as binary variables (agree/not agree, positive/negative, yes/no, etc.) and adopted Chi-square tests to examine the differences between groups. This strategy indeed gave up some richness of the data, but the results it generated are more meaningful and explainable (see more discussion in section 2.5 Limitations and Strengths). Neutral or indifferent responses (e.g. 3 in a scale of 5-point) are coded as negative response (0) in the binary variables.

without solidarity. Stratified analysis is used to examine the moderation and confounding effects. The sampled population is divided into subgroups by the moderators and confounding variables. Within each subgroup, Chi-square tests are then used to test whether there are attitude differences between those with and without solidarity.

All analyses were performed in SAS 9.4 software.

2.6 Results

Table 1 summarizes the basic characteristics of people with and without solidarity. **Table 2** and **Table 3** show the results of Chi-square tests of the focal relationship.

Table 2 shows that those with solidarity have different attitudes toward the health system than those without solidarity. From the percentages, it is shown that a higher proportion of those with solidarity have greater willingness to pay more to support better healthcare quality in the publicly-funded health system.

Table 3 shows that those with solidarity have different attitudes toward the health system than those without solidarity. From the percentages, it is shown that a higher proportion of those with solidarity have supportive attitudes toward the government's role in healthcare provision.

Table 4 summarizes the results of stratified analysis. Chi-square tests in each subgroup show that the relationship between solidarity and the willingness to pay more to support better healthcare quality in the publicly-funded health system is not affected by variables including education, household income, perceived system performance in terms of efficiency, and experiences engaging with the system.

Interestingly, the relationship is moderated by age cohort. The relationship only presents in the younger cohort (below 60 years old).

Another noticeable result is the effect of perceived system performance in terms of the prospect of the system. For those who hold a pessimistic prospect, the relationship between solidarity and the willingness to pay more is significant, but the percentages show a reverse direction. This finding means that, unlike other subgroups, among this subgroup with pessimistic prospect, a higher proportion of those with solidarity are not willing to pay more; while in the subgroup with optimistic prospect, the relationship remains significant and the direction remains the same.

Table 4 also shows that, different from the findings shown in **Table 3**, the relationship between solidarity and people's supportive attitude toward the government's role in healthcare provision does not present in most of the subgroups. This relationship only presents in the female subgroup.

In sum, the relationship between solidarity (represented as overall social trust) and supportive attitude toward the system could be found in the younger cohort (below 60 years old) (H1). Specifically, a higher proportion of people with overall social trust are willing to pay more to enhance the care quality of the publicly-funded health system; and a higher proportion of females with overall social trust have a supportive attitude toward the government's role in healthcare provision. However, different from the hypotheses (H2 and H3), the moderating effects of experience engaging and perceived system performance in terms of efficiency with the health system cannot be found.

2.7 Discussion

This study presents preliminary findings identifying a significant relationship between solidarity and people's supportive attitude toward the publicly-funded health system – the

National Health Insurance – although the direction of the relationship remains unclear due to the nature of the cross-sectional data used. This study does, however, serve as one of the few earliest attempts to empirically and quantitatively examine this relationship. It adds to the findings of the previous study (59), showing that beyond the selected users' personal justifications, the relationship between solidarity and supportive attitude toward the NHI is significant in this nationally representative sample.

The findings leave several puzzles that are worth further investigation. First, the relationship between solidarity and willingness to pay more to enhance care quality is only observed in the younger and middle-aged populations, that is, those who were below 60 years old. This result may be explained in several ways. For instance, the relationship only presents in the younger generation because they, as the major caregivers and medical bill payers in the family, could better appreciate the implementation of a publicly-funded health system. Second, it may be because the younger generation grew up in the era of democratization, and thus could recognize the implementation of the NHI as the result of autonomous demands made by the people, rather than the unilateral good intentions of benevolent authoritarian rulers. For policymakers, it seems that little could be done to deal with the age cohort factor. Nevertheless, one implication from this finding is that solidarity is a significant factor at least for the younger generation (and indeed, among the survey respondents, 81.92% of those with solidarity belong to the younger generation); and the younger generation will grow older, suggesting that the relationship may become more important in the future and is therefore worth monitoring.

Second, the relationship between solidarity and supportive attitude toward government's role in health provision is only observed in the female population. This seems to be yet another factor about which policymakers can do little. However, it raises the further question why,

opposed to the hypothesis, males are indifferent to this relationship.

Third, the expected moderation effects of people's experience engaging with the health system do not present. No matter what people's past experiences may be, the relationship between solidarity and willingness to pay more to enhance care quality remains significant. This finding is somewhat different from the previous research (61). Of course, one limitation to note is that in this study, experience engaging with the health system is measured only by the item "In the past 12 months, have you been in hospital or a clinic as an inpatient overnight?". Maybe the severity of the illness behind this item is not great enough to distinguish a subgroup of patients who have had a highly intensive interaction with the system.

The other moderating effect of people's perceived health system performance is presented in terms of people's evaluation of the future of the health system. Among those with pessimistic prospect, a higher proportion of people with solidarity are not willing to pay more to enhance care quality. From the previous research, those who do not perceive the system as having good performance may not be supportive toward the system (61), but why would there be a reverse direction? This finding requires further study.

This analysis has several limitations. First, the response rate is 60%, relatively low in comparison with social surveys generally. However, the test of representation has been conducted to ensure the national representativeness of the sample (60). Second, in terms of measurement, the independent and dependent variables and the moderator of the focal relationship are all subjective items derived from the questionnaire. Hence, the categorization and scaling are inevitably arbitrary to some extent. Furthermore, the major independent and dependent variables are measured by single items alone, and for the purpose of analysis, all variables are coded as binary variables. This method sacrifices the richness of the ordinal items

from the questionnaire. However, the strategy may give more confidence in the significant differences found. Third, for measurement of the independent variable, sense of solidarity, one important aspect – national identity – is not available in the dataset. This omitted aspect may limit interpretation of the results and bias the association toward the null. Nevertheless, the dataset TSCS 6th Wave 2nd Phase (Topic: Health) is still the best plausible large-scale empirical measure for the health policy field to probe into the social foundations of the health system in Taiwan.

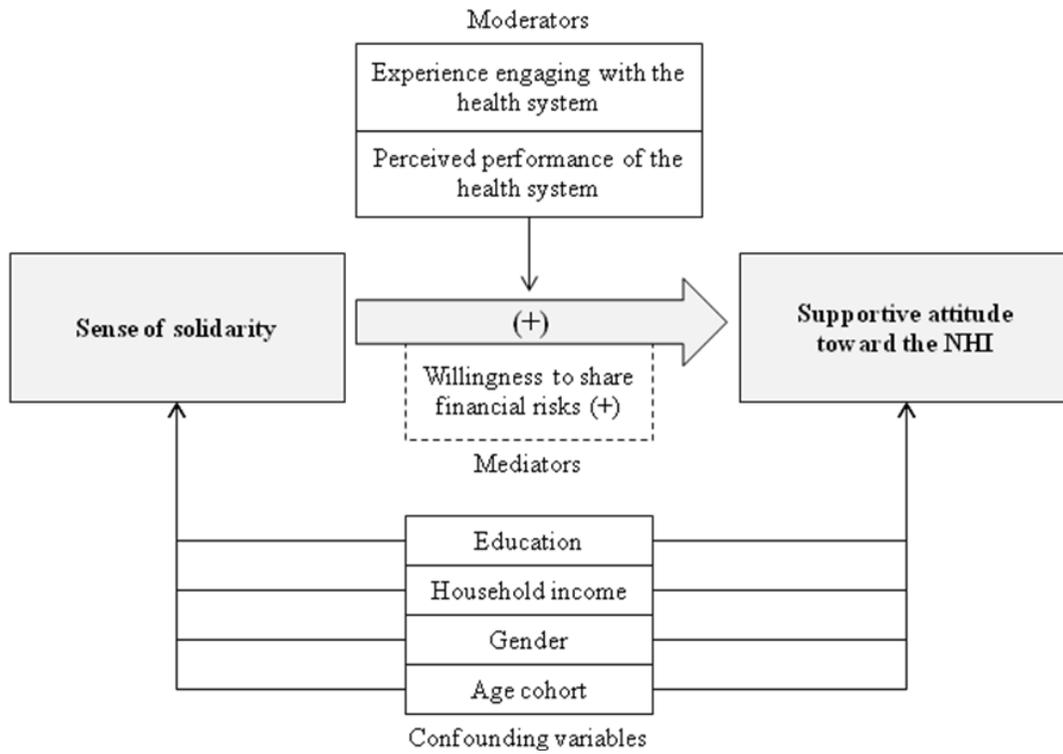


Figure 1. The Conceptual Framework

Table 1. The basic characteristics of people with and without solidarity

Characteristics	With solidarity	Without solidarity
	(%)	(%)
<hr/>		
Gender		
Male	49.56	49.46
Female	50.44	50.54
Education		
High	40.33	21.64
Low	59.67	78.36
Family income		
High	52.09	46.51
Low	47.91	53.49
Age cohort		
Younger	81.92	65.78
Older	18.08	34.22

Table 2. The results of Chi-square tests of the difference between solidarity and the willingness to pay more to support better healthcare quality of the publicly-funded health system

	Is willing to pay more	Is not willing to pay more	Chi-Square value
With solidarity	60.08	39.92	39.13***
Without solidarity	45.93	54.07	

Note: * $p \leq 0.05$, ** $p \leq 0.01$, *** $p \leq 0.001$

Table 3. The results of Chi-square tests of the difference between solidarity and supportive attitude toward the government's role in healthcare provision

	Support government's role	Do not support government's role	Chi-Square value
With solidarity	54.56	45.44	4.05*
Without solidarity	50.04	49.96	

Note: * $p \leq 0.05$, ** $p \leq 0.01$, *** $p \leq 0.001$

Table 4. The results of stratified analysis of the relationship between solidarity and supportive attitude toward the health system

Subgroups	Supportive attitude toward the health system	
	1. Is willing to pay more to enhance care quality	2. Support government's role in health provision
Age cohort		
Younger cohort	33.53***	0.95
Older cohort	0.87	0.56
Gender		
Male	21.40***	0.75
Female	17.93***	3.90*
Education		
High education	7.37**	0.004
Low education	16.40***	1.86
Household income		
High	21.32***	3.02
Low	16.80***	1.41
Perceived performance: efficiency		
High efficiency	32.61***	2.33
Low efficiency	9.66**	2.07
Perceived performance: prospect		
Optimistic	34.48***	1.76
Pessimistic	8.30**	2.05

(reverse direction)

Experiences engaging

with the system

Have some	4.08*	0.45
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Do not have any	33.87***	3.74
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Note: Stars represent statistical differences between those with and without solidarity in the dependent variable of interest in each subgroup. * $p \leq 0.05$, ** $p \leq 0.01$, *** $p \leq 0.001$, - not significant results (the Chi-square values are not showed).

CHAPTER 3: HEALTH AND LONG-TERM CARE SECTOR SOLIDARITY IN FOUR EAST ASIAN COUNTRIES

3.1 Background

As a rapidly aging society, Taiwanese citizens now face increasing care needs that go beyond the scope of clinical health services alone – e.g. the need for long-term care (LTC) services. Similarly to many European countries, as well as Japan and Korea in Asia, Taiwan sought to develop a publicly-funded LTC system once universal health coverage had been secured by the National Health Insurance (NHI) system. Nevertheless, unlike the prevalent and stable notion of solidarity that sustains political and social support for the health system, there are significant variations in the underpinnings of the LTC sector. For instance, in Taiwan, it took only three years for the government to generate the NHI proposal and complete the legislative process; however, it has taken more than ten years to introduce a full-scale LTC funding structure and as of this writing the LTC system is still not fully in place. Moreover, the NHI covers every legal resident regardless of citizenship, while the recently reformed LTC 2.0 plan only covers Taiwanese citizens.

Certain broad trends can be observed when one compares the two separate trajectories of development for the health and LTC systems. Within the boundary of a single country, people who are willing to commit to share the risks in health needs (by either SHI or tax-based systems) are not necessarily willing to make the same degree of commitment regarding LTC needs. In addition, the scope of solidarity in the health sector often extends beyond the citizenry of a single country – covering foreign workers and students and other non-citizen residents – while only a few countries have a similarly broad scope of solidarity for sharing LTC needs. (Note that the

term “citizens” used in this paper includes both citizens and permanent residents if not otherwise noted. Therefore, the term “non-citizen residents” does not include permanent residents.)

Entitlement to publicly-funded LTC services is seldom granted to non-citizen residents. These trends are revealing in the discussion of solidarity and sustainability of health and LTC systems.

Why does solidarity in the LTC sector appear much later than in the health sector, or sometimes never forms? How do we explain these differences considering that, from the theoretical perspective, both health and LTC needs are essential components of quality of life that constitute equal opportunity (40) or human functioning (62-65), and that from a practical perspective their financial burden cannot be borne entirely by private actors (individuals and families) alone? Why does health sector solidarity have a higher degree of stability, while LTC solidarity does not? Why can health sector solidarity make SHI into a “way of life” (5), while LTC is not seen that way? How do these differences affect the sustainability of publicly-funded health and LTC systems? These are puzzles that this third part of the dissertation seeks to investigate.

By comparing the actual practices of solidarity in health and long-term care systems, possible explanatory factors for the different trajectories among the health and LTC sectors can be identified. To address this difference, the cultural and ethical/normative assumptions regarding health and LTC needs in the four countries are examined. This chapter therefore seeks to answer the following key questions: What are the actual practices of solidarity in the health and long-term care sectors among four East Asian countries: Taiwan, Japan, South Korean, and Singapore? Why does solidarity in the LTC sector come much later than in the health sector, or perhaps never comes?

3.2 Rationale for Case Selection

Taiwan, Japan, South Korean, and Singapore are middle- to high-income countries in East Asia with well-developed, sophisticated publicly-funded health systems that have operated for more than twenty years.

Japan was the earliest country to establish a SHI scheme in East Asia. In 1961, Japan initiated its National Health Insurance program, integrating the Employee Health Insurance that had been established before World War II and providing universal coverage for all residents. Following this incremental reform approach, Taiwan and South Korea also integrated occupation-based social insurances and initiated National Health Insurance systems in 1995 and 2000, respectively. Singapore initiated a medical savings account system, called Medisave, in 1984. Subsequently in 1990, Medishield, a voluntary social insurance program, was introduced to cover catastrophic health events not covered by Medisave. In 1993, Medifund, a means-tested and tax-funded program, was introduced as a safety net for healthcare services. Among the four countries, Singapore is the only one that does not provide public funding for health services for non-citizens. Before the end of the twentieth century, some form of solidarity in the health sector had been established in all four countries.

The developmental trajectory for LTC systems in these countries, however, varied quite notably. Japan and South Korea established mandatory social LTC insurance (LTCI), in 2000 and 2008, respectively (66, 67). Taiwan implemented a tax-based subsidy program for LTC services in 2007, which was reformed in 2017 to expand the service package and establish universal coverage for the disabled population (68, 69). Singapore has implemented non-mandatory social insurance (citizens are automatically enrolled but can opt out) named ElderShield since 2002. ElderShield provides in-cash benefits for LTC services in the event of severe disability for up to

six years (70). In 2018, Singapore announced a new LTC insurance program, CareShield Life, that will replace ElderShield in 2020. Despite these variations, a common feature shared by all four countries is that the institutional arrangements for LTC came later than the ones for the health sector. This pattern presents a good opportunity for comparative analysis.

For the purpose of comparison, several contextual factors can be held constant in these four countries. First, culturally, societies in the four countries can be broadly considered as influenced by Sino-culture and Confucian ethics, which tend to put the responsibility of family at the core of caring (38, 69, 71). Economically, over the course of the twentieth century, these four countries have experienced the transformation of their economic systems from agricultural, to second-wave manufacturing-based industrial, to third-wave service- and knowledge-based industrial economies. Demographically, these four countries are the ones with the most rapidly aging populations in the developed world (**Table 1**). They experienced this demographic transition within a shorter period of time than any developed countries in Western Europe (72).

With these contextual factors held relatively constant, the investigation can focus on the actual practices of solidarity among the four countries. Singapore is an external case, for it demonstrates a limited degree of solidarity on both health and LTC arrangements among citizens and almost none among foreigners.

3.3 Conceptual Framework

In order to assess the details of the institutional arrangements in the four countries, a clear and precise definition for solidarity is needed for analytic purposes. From the literature, the concept of solidarity can be understood in two ways: normative and empirical. Normatively, solidarity can be considered an ethical source that justifies joint actions taken by the people (29).

Empirically, solidarity is a concept that is used to describe specific social phenomena.

Three components of solidarity should be considered (**Table 2**). These three factors come from a simple and yet useful definition of solidarity – “a commitment to carry costs to assist others with whom we recognize similarity in a relevant respect” (3). Note that I use this definition as the starting point of discussion throughout the essay. Interestingly, Prainsack and Buyx actually propose this definition for the purpose of normative or ethical analysis of solidarity. Nevertheless, in this paper, I consider the definition itself as an empirical description of the social phenomenon of solidarity. As for the normative component, I will return to that piece in the Discussion section. The relevant similarities mentioned in this definition consist of the first two components of solidarity: the scope of “the community of mutual recognition” (5) and the scope of interdependence.

The scope of the community of mutual recognition identifies who belongs to the group of people who share similar risks and are interdependent on each other in the field of concern. For example, suppose that people recognize the fact that any legal resident who lives in a country shares similar health risks, regardless of his/her citizenship or immigration status; then the scope of the community of mutual recognition for health risks could include every resident as entitled to the social health insurance.

The scope of interdependence identifies the factors to which people commit among the members of the community of mutual recognition. In the previous case, people might commit to health needs that are caused by a set of shared health risks.

The “costs” of joint action mentioned in the definition forms its third component. These costs may be financial, social, or emotional – anything that might constitute a burden for members of the community to participate in the joint actions to which they have committed. Only when the

costs to assist others are reasonable would these joint actions be possible.

Empirical solidarity can also be distinguished as two different types: *motivational and institutional* solidarity (73). The first, *motivational* solidarity, is an analytic concept that can be used to describe a certain psychological state of mind, in which a group of interdependent people share a sentiment or common identity and a source of political legitimacy, which serves as the source of political commitment for the group to take joint action. This type of solidarity is used as the definition in the first and the second chapters. In this chapter, however, the other type of empirical solidarity, *institutional* solidarity, is adopted.

Institutional solidarity is used to describe the policy arrangements that put psychological sentiment and political commitment into practice. According to Prainsack & Buyx (3), there are three “tiers” of solidarity that could describe the levels of institutionalization. At tier1, people recognize the relevant similarities between each other, showing “a willingness to carry costs to assist others.” Informal interpersonal assistance might appear, but the costs involved are relatively small or irrelevant. At tier 2, a clear community of mutual recognition in which people recognize their relevant similarities is identifiable. The commitment to carry costs becomes the group norm, but is still informally applied; it is more like voluntary mutual assistance. At tier 3, some formal institutions/policy arrangements are applied to legalize the mechanism of cost sharing and mutual assistance. In most cases, the higher tiers are built on the basis of the lower tiers. For the purpose of cross-national comparison, this study focuses on tier 3 alone and uses tier 3 solidarity to define the actual practices of solidarity.

The actual practices of solidarity are hence conceptualized as the following three components in tier 3 formal institutional arrangements that put sentiment and commitment into practice in a given country:

1. The scope of interdependence (What services and care needs are people committed to share with each other through a publicly-funded institutional arrangement?).
2. The scope of community (Who counts as one of ‘us’ to whom people are going to commit?).
3. The costs of joint actions (How are financial contributions/burdens distributed among the community?).

Different from the definitions used in the previous two chapters, this concept of solidarity defines the term from a retrospective viewpoint. The existence of solidarity is represented by the actual policy arrangements with regard to the three components.

The *transitions* of actual practices of solidarity are defined as the trends in which the scope of the community, the scope of interdependence, and/or the costs of joint actions are changed as represented by the reforms of existing policy arrangements. In such situations, the boundary and contents of solidarity are considered as being reforged. Through the investigation of official documents, the transitions of actual practices of solidarity in health and LTC systems, respectively, in the four countries are identified. The purposes and meanings of each transition will be noted as well.

3.4 Materials

The official policy reports and announcements, laws and regulations, archival documents, and secondary literature are included in the analysis (see **Appendix**).

3.5 Methods

For this question, I use comparative policy analysis. The analysis starts with an overview of

the current institutional arrangements of publicly-funded health and LTC systems among four East Asian countries: Taiwan, Japan, South Korean, and Singapore.

Measurement

The scope of the community is defined as the group of people that are entitled to health or LTC services which are funded at least partially by public money within the specific country of interest. The public money referenced here includes general tax revenue, value added tax, earmarked tax, payroll tax, social insurance premium, or other forms of mandatory mechanisms by which money is collected from individuals.

The scope of interdependence is defined as the types of items that are included as part of the service package, as benefits or entitlements to the beneficiaries of the institutional arrangements of the health or LTC systems. The types referenced here include curative services, preventive services, and long-term care services. The following, however, is not an exhaustive list of types. The actual list depends on the extent to which each item is relevant to the comparative analysis of solidarity.

The costs of joint action is defined as the percentage of funding contributed from each subgroup, such as employees, employers, national/regional/municipal governments, or other divisions of the insured or subsidized population of the system. The percentages are defined by the laws, regulations, administrative contract, or other legal bases.

The transitions of actual practices of solidarity is measured when the scope of the community, the scope of interdependence, or the costs of joint actions has been significantly changed by executive orders, legislative efforts, court verdicts, or other instances in the specific country of interest.

3.6 Results

The basic models and the three components of solidarity in the health and LTC sectors in the four countries are summarized in **Table 3**.

Japan

Japan has had a universal social health insurance scheme, consisting of the Employee Health Insurance (also translated as Employee-based Insurance, in Japanese: 健康保険, *Kenkō-Hoken*) and the National Health Insurance (also translated as Citizens' Health Insurance, in Japanese: 国民健康保険, *Kokumin-Kenkō-Hoken*) systems, since 1961(74). Citizens, permanent residents, and foreigners are compulsorily included. Those who are employed are covered by employee health insurance, in which the employer and the employee each pay 50% of the premium. Those who are not employed and are not considered dependents are covered by the National Health Insurance system, in which the insured pays 50% and the local government pays another 50% of the premium. Both employee health insurance and National Health Insurance are backed by multiple insurers, which are not-for-profit independent organizations (75).

Since the program began, the scope of its community has not changed. Only after 2008, due to the deteriorating financial status of the social health insurance system, was the Elderly Health Care Security Act (EHCSA) initiated (76). Under EHCSA, those aged 75 or older are, in a sense, separated from the previous social health insurance scheme to form an independent social health insurance pool called Late Elder's Health Insurance (LEHI). This does not mean that this population is excluded from the health sector solidarity community. On the contrary, they are still

covered by the LEHI, which is also social health insurance. Even more relevant, in terms of the costs of joint action, this population receives a greater proportion of public funding. They are required to pay only 10% of the premium, while the others (insured either by employee health insurance or National Health Insurance) must pay 50%. The special concern regarding the older population (75 or older) is a phenomenon unique to Japan (see Discussion section).

The scope of interdependence also remains largely unchanged. Despite there being multiple insurers behind the employee health insurance and National Health Insurance programs, the fee schedule is negotiated and determined by the Ministry of Health, Labour and Welfare (MHLW, known as Ministry of Welfare before 2000) in the central government and is applied to every social health insurance entity in Japan (75).

Japan's situation appears to follow a standard development process of a social health insurance model. Japan's post-WWII modernization and legal and policy-making process can indeed be viewed as a form of policy "heritage" taken from Germany. In the beginning, the occupation-based social insurance (often called labor or employee insurance) was initiated to secure the supply of healthy laborers and to suppress socialist movements. After WWII, European countries started to adopt the concept of universal citizenship, securing citizens' social rights in different aspects, of which healthcare is a major component. Japan adopted this new approach and became the first country in East Asia to establish a universal health arrangement.

In addition to healthcare, Japan was also the first East Asian country to adopt social LTC insurance (LTCI). In 2000, those who are older than 40 years old were included in the LTCI and required to pay a premium; those who were 65 or older became eligible for reimbursement. Citizens, permanent residents, and foreigners are all compulsorily included. Like healthcare, the LTCI is run by multiple insurers. The premium varies, but the fee schedule for services is

determined by the government.

Different from the incremental expansion of social health insurance from occupation-based to universal, Japan's LTCI was universal when it was introduced. This fact reflects the timing of the establishment of LTCI, which was the democratic government's response to rapidly increasing LTC needs. It would have been suspicious if the insurance was still based on characteristics of sub-populations (e.g. linked back to one's occupation). Its universal introduction also reflects the results of policy diffusion. The basic model of LTCI resembles the experience of implementing social health insurance in Japan. The three components of solidarity are, therefore, similar to each other in the healthcare and in the LTC sectors. This phenomenon can also be observed in Taiwan and Korea.

The only difference in Japan is that the LTC sector solidarity community only consists of those older than 40. On one hand, this arrangement is politically plausible, for those younger than 40 might find it difficult to imagine the risks of disability and long-term care needs at their relatively young age, and hence might be reluctant to pay for LTCI. On the other hand, however, this arrangement limits the risk-sharing pool and the scope of intergenerational transfer, in effect declaring that the responsibility for LTC and the joint action to be taken to fulfill this responsibility does not fall upon the younger generation.

Singapore

Singapore has had a unique publicly-run medical savings account system for healthcare called Medisave since 1984 (77). Although all citizens and permanent residents are required to participate, the scope of community is strategically limited within each individual citizen's family, because the money saved in the account can only be used for personal or immediate

family members' medical bills. In this sense, there is actually no broader health sector solidarity shared among Singaporeans. Individuals and families must face the financial risks themselves.

The government, however, still plays an active role in the health system. The government runs the Central Provident Fund, of which Medisave is a part. The government also heavily subsidizes the health system through running public hospitals and polyclinics (50% of all hospitals are public), in which a proportion of inexpensive beds are secured (76% of all beds are public) (78). Still, in comparison with others (Japan 84%, Taiwan 63%, Korea 59%), Singapore spends a lower percentage of public funds, around 55%, in total health expenditures (79, 80). The government also runs several add-on options for Singaporeans, including Medifund initiated in 1993 and MediShield Life initiated in 2015 (replaced MediShield initiated in 1990). MediShield Life is a health insurance plan that provides supplemental funds to Medisave to pay medical bills derived from catastrophic events. Medifund is a tax-based means-tested subsidy program serving as a part of a safety net for the poor in Singapore. These two schemes are also administered by the Central Provident Fund Board and are available only to citizens and permanent residents.

With its history as a British colony, Singapore still has a larger proportion of publicly-owned hospitals and beds compared with Japan, Taiwan, and Korea, where providers are mostly private. Nevertheless, Singapore purposively adopted a health financing system that is very different from those used by its counterparts in East Asia and other developed countries.

This unique arrangement can be largely explained by Singapore's (still) authoritarian system of governance and its adoption of "Asian Values" as defined by its former authoritarian strongman: Lee Kuan Yew (LKY) (81). He believed that welfare, and inferably the social rights of universal citizenship, are "western" concepts that cannot be afforded by a developing city-state like Singapore. Not only is the developing city-state unable to afford such systems, he

also firmly believed that a society upholding Confucian ethics (empirically) does not and (normatively) ought not to embrace such “western” and “individualistic” values of social rights and universal citizenship embedded in a solidarity-based publicly-funded health system (82). The responsibility for healthcare – in LKY’s view – is first and foremost the responsibility of families, as required by Confucian virtues such as filial piety (children/juniors to parents/elders) and nurturing (parents/elders to children/juniors) (70). Utilizing centralized political control in a one-party ruling regime, LKY and his successors were able to embed this interpretation of Confucian or Asian Values into health policy practices – e.g. a highly regulated and scope-limited personal medical savings account system.

However, this understanding leaves a puzzle when turning to examining Singapore’s recent reform in the LTC sector. Prior to the reform, the LTC system resembled the healthcare system. In 2002, Singapore initiated a voluntary, privately-run (by three private insurers appointed by the government) LTC insurance called ElderShield for citizens and permanent residents who were 40 years or older. They would be automatically enrolled in ElderShield, but could choose to opt out. Similar to Medisave, ElderShield provided cash reimbursement for the insureds to pay their LTC bills for up to 72 months. Again, the scope of community of LTC sector solidarity is limited to individuals and their families. This arrangement for LTC seemed to follow the same logic as in healthcare, until a reform project was announced by the Singaporean government in May 2018.

Subsequent to the reform, new LTC insurance named CareShield Life will replace ElderShield in 2020 (83). Different from its predecessor, CareShield Life is much closer to a *genuine* solidarity-based social LTC insurance model. First, after 2020, citizens and permanent residents who are 30 or older will be compulsorily enrolled in CareShield Life; they can no longer choose to opt out. This feature implies that the scope of community will be changed from

individuals and their families to the whole body of all citizens over 30. Second, the insurance will not be administered by the three private insurance companies; instead, it will be administered by the Ministry of Health directly. The government will be the single-payer. Third, the 72 months of cash reimbursement will be cancelled. Future insureds will be reimbursed as long as they are “severely disabled” as measured by ADLs and IADLs. Considering that being disabled elderly is a state from which individuals have very low chance (if any) of recovery, this arrangement implies that CareShield Life will pay for the insured’s LTC bills until his/her death. This is a substantially greater commitment from the public system. The scope of interdependence is therefore hugely widened as a result of this reform. In short, with the reform of CareShield Life, Singapore will adopt a solidarity-based LTCI program which deviates sharply from its previous arrangements in both the health and the LTC sectors.

How this abrupt turn may be explained has yet to be determined. The Singaporean government, following its long-standing authoritarian and paternalistic style, has thus far released only limited information other than basic facts and advantages of the proposed reform project. Notably, besides one petition to equalize premiums between males and females, little information expressing disadvantage or criticism could be found on the Internet. Nevertheless, this reform itself can be seen as a symbol of the strengthening of actual practices of solidarity in the LTC sector in Singapore.

Taiwan

The developmental trajectory of Taiwan’s health system is similar to that of Japan, but with two differences. One is that Taiwan has a time lag of about three decades, likely due to its later economic development and political democratization. Japan was democratized by the Supreme

Commander of the Allied Powers (or General Headquarters, GHQ) after WWII. Along with the international trade scheme led by the US government, Japan enjoyed a niche in the global division of labor and experienced advanced industrialization (note that Japan already had a high level of industrialization before WWII) and economic development. From the 1950s-70s Japan experienced a period called “rapid growth” (In Japanese: 高度成長, *kōdo seichō*). In the meantime, Taiwan was still struggling to transform from an agricultural to a light industry economy. The first occupation-based social insurance for military personnel was initiated in 1953, followed by insurance for civil servants and teachers and also labor insurance, both in 1958, providing limited coverage for health services. The National Health Insurance program was initiated in 1995, about thirty years after Japan’s universal health coverage was instituted in 1961 (75).

Besides the time lag, the other difference in Taiwan is that, contrary to Japan’s decentralized social health insurance with multiple insurers, Taiwan adopted a single-payer National Health Insurance (NHI) system that is highly centralized and heavily subsidized by the government (tax money). This situation reflects the political atmosphere during democratization in the 1980s-90s, when the NHI was proposed and soon passed by the Legislative Yuan (the name of Congress in Taiwan) in 1995 (50).

Starting with the first military personnel insurance, Taiwan’s scope of community gradually expanded throughout the years. With the establishment of NHI in 1995, the scope of community is now universal. Citizens, permanent residents, and foreigners who are employed or have residency for more than six months are compulsorily included. Although the NHI integrated the health coverage of all the occupation-based social insurances, it still retains several traits that reflect the historical legacies of its occupationally segregated past.

In terms of the costs of joint action, for example, insureds with different employee status have to pay different percentages of the premium. Generally, an employed person pays 30% of the premium, his/her employer pays 60%, and the government subsidizes the remaining 10%. However, if one is a private school teacher, one has to pay 30% like other employees, but his/her employer only has to pay 35%, while the government subsidizes the remaining 35%. If one is a farmer, fisher, or irrigation worker, one pays 30% and the government subsidizes 70%. If one is an occupational union member or a seaman serving on foreign vessels, one pays 60% and the government subsidizes 40%. If one is self-employed, one has to pay 100% with no subsidy (56). These varying shared percentages of the premium indicate continuing occupation-based differentiations within the seemingly universal NHI.

The scope of interdependence has remained universal and unchanged from 1995 to the present. The fee schedule is negotiated by the National Health Insurance Committee and is determined by the Ministry of Health and Welfare (MOHW, known as Department of Health from 1971-2013) of the central government.

Taiwan's LTC system also has had a time lag compared to Japan, although the interval for LTCI was shorter. While Japan initiated its LTCI in 2000, Taiwan initiated a tax-based universal subsidy LTC program – the *Ten-year LTC Plan* – in 2007, and expanded it in 2017. Before 2007, the government rarely intervened in the LTC sector. There were only a few means-tested social assistance programs for poor older citizens. The 2017 expanded program – the *Ten-year LTC Plan 2.0* (the LTC 2.0 Plan) – pays for community and home care services for disabled people who are 65 or older (exceptions are made for indigenous peoples who are 55 or older and severe dementia patients who are 50 or older) (68). Different from Japan's LTCI, the LTC 2.0 Plan specifically limits the scope of community to only Taiwanese citizens. In addition, because the

program is paid by general tax revenues, not premiums, in a sense the costs of joint action are shared among the whole population.

In terms of the scope of interdependence, the LTC 2.0 Plan provides in-kind subsidies for services supplemental to family care. This provision implies that the program is actually not as universal as it appears. It still presumes that the responsibility for care should be borne by individuals and families, while the public LTC system only plays a secondary role. The right to fulfill LTC needs is not considered a social right of citizens.

This phenomenon could, of course, be explained by several institutional factors, such as the continuing reliance on foreign caregivers and the discontinuity between social and health administration (69); but the phenomenon itself poses an interesting question when compared with the actual practices of solidarity among the health sector. While LTC sector solidarity remains suspicious, Taiwan seems to embrace a universal citizenship for healthcare and even expand the scope of community to foreigners, not to mention the scope of interdependence – the comprehensive coverage of healthcare services.

Korea

South Korea's developmental trajectory of its health and LTC system is almost identical to Taiwan's. Korea had a health system consisting of several occupation-based social insurances. A major reform in 2000 – the result of political democratization – integrated the social insurance programs and initiated a single-payer National Health Insurance (NHI). Citizens, permanent residents, and foreigners (since 2006) are compulsorily included (84). The administration of the NHI is centralized, and the services covered by the NHI are listed in the fee schedule.

The costs of joint action are, however, different from those in Taiwan. While the Taiwanese

government subsidizes a proportion of the premium, the Korean NHI premium is paid by employees (50%) and employers (50%) alone. An exception is that if one is a private school teacher, one pays 50% and receives 50% subsidy from the government. The other exception is that if one is self-employed, one pays 100% of the premium. The legacies inherited from the past occupation-based insurance systems are less obvious in Korea's NHI than in Taiwan's.

In the LTC sector, similar to Japan, Korea adopted social LTC insurance (LTCI) in 2008. The scope of community differs in that foreigners may choose to opt out of the LTCI in Korea (85). This makes Japan the only one of the four East Asian countries with a compulsory LTCI for foreigners. This regulation also places the scope of community of LTC sector solidarity in a “dynamic” state, meaning that the boundary of the community that shares the care needs is always changing because foreigners can choose either to stay in the community or to leave. This arrangement is quite rare among the policy arrangements of health and LTC systems in developed countries.

The adoption of LTCI in Korea could be considered a result of policy diffusion from health insurance, which also is observed in Japan. Like the centralized structure in healthcare, the LTCI is also run by the single-payer National Health Insurance Service (NHIS). In terms of the scope of interdependence, the LTCI reimburses in-kind institutional and home LTC services to people aged 65 or older. The reimbursed items are defined by the NHIS.

Summary

In this section, the basic model and actual practices of solidarity of the health and LTC sectors in the four countries were presented in detail. Utilizing a comparative perspective, the following section will discuss several key observations and policy implications drawn from these

four countries.

3.7 Discussion: Comparing Actual Practices of Solidarity in Health and Long-term Care

The Scope of Community: Incremental Transition and One-shot Expansion

From the coverage expansion processes occurring in these four countries, several specific trends can be observed. First, the scope of the defined community in the health sector is typically expanded in an incremental manner. Japan, Korea, and Taiwan all started with limited occupation-based social insurances, which then expanded into the inclusion of citizens, permanent residents, and foreigners. This expansion happened first, after adequate economic development; and, second, after a successful process of political democratization. In each case, at the last stage, there was a clear public demand for state action to recognize social rights and to push the health system to pursue universal coverage. However, this incremental expansion was not observed in the development of the LTC sector in these four countries. The scope of community within these LTC systems continues to remain more constrained over (their relatively short) existence. Japan and Korea include foreigners in their LTCI scheme, although in Korea foreigners may choose to withdraw. Taiwan and Singapore, on the other hand, exclude foreigners in the first place. Despite this difference, the publicly-funded LTC systems in Japan, Korea, and Taiwan were all initiated as part of major reforms. Before these reforms, there were only very limited means-tested subsidy programs for older people's LTC care. Singapore, as an outlier, has a unique trajectory of development. Its public systems' financing is built on the ground of the CPF, strictly limiting the responsibility for healthcare within families. Nevertheless, even Singapore has adopted a recent, major reform to its LTC program.

The incremental expansion in healthcare and one-shot expansion in LTC suggest that health needs are constructed as a social risk that should be shared by the community earlier than are LTC needs. Indeed, the earliest purpose of initiating social health insurance was to secure an adequate supply of laborers and suppress labor/socialist movements. However, once the democratization process had begun, healthcare would become one of the first policy domains demanded by public opinion. The common danger derived from the health risks people perceive drives the government to propose health reforms aimed at securing universal health coverage. This demand is so strong that it could easily overcome the cultural norms of the society. In this four-country East Asian case, the dominant Confucian ethics system requires the family to be the basic unit of care. The responsibility for care seldom extends beyond the boundary of family into the public domain. Only for those in extreme poverty would the government have responsibility to assist (71). Nevertheless, the financial burden for healthcare might be too huge, or the living conditions of those with severe illnesses too poor, such that public compassion or empathy is aroused, and therefore generates demand for a solidarity-based health system to share the financial risk.

The social risk of LTC has, however, only recently been recognized. This time lag is itself worth noting. On one hand, one could rightly infer that since Japan, Korea, and Taiwan have just encountered the aging population period, people are just starting to become aware of the burden of LTC. This explanation is a reasonable one. Perhaps individuals seldom learn from others' experiences until they face the challenges themselves. On the other hand, the notion of "risk" might not be applicable to LTC needs at the same degree as in healthcare needs. For healthcare needs often are derived from tragic events which leave one badly ill or injured. These events are unpredictable, and yet could be reasonably expected to happen across a large population.

Moreover, with proper treatment, in many instances one could be expected to recover from this state of severe illness or injury. Hence the notion of risk and solidarity becomes applicable here: to carry the costs of joint action to establish a public system to share health risks. This logic also allows the inclusion of foreigners, for they too are subject to the common health risks.

LTC needs, however, are different. LTC needs are derived from the nature of irreversible deterioration of functioning during one's life course. The deterioration is not caused by a single event, but is the result of a set of continuous events. In addition, one cannot recover from this state of disability. The services needed are life support, rather than treatment. In a sense, LTC needs are inevitable for a person. One could of course try to delay deterioration of functioning and compress the disability period in his/her life course as much as possible (86); however, eventually entering a state of disability is in many cases unavoidable. Therefore, the question here is whether there are risks to be shared by carrying the costs of joint action in the LTC sector.

In the four countries, the answer to this question seems to be clear. The social risk of LTC has begun to be recognized, at least in the twenty-first century. Even in Singapore, the one country among the four East Asian countries with arguably genuine commitment to Confucian ethics with its version of "Asian Values," the social risk of LTC has been recognized. Does this prevailing phenomenon in East Asia imply a "farewell to old legacies" of Confucian ethics (87)? Why would the seemingly unavoidable LTC needs be constructed as a social risk and attributed as part of the public's responsibility to take care of by a solidarity-based system?

The Scope of Community: Citizenship and the Boundary of Solidarity

Among the four countries, Singapore is the one that limits both health and LTC systems only to citizens. Japan, on the contrary, is the one country that opens both systems to foreigners.

Taiwan and Korea fall in between the two. They open the health system to foreigners, while limiting the LTC system to citizens. Clearly, healthcare has been considered a universal value such that its boundary should include all residents in Japan, Korea, and Taiwan, while LTC is closer to an entitlement, or even a privilege, of citizens in Singapore, Korea, and Taiwan.

One practical explanation for this difference between health and LTC systems is that foreigners are included in the health system because that system has a public health function – preventing, controlling, and treating infectious diseases – and this function is needed regardless of the patients’ citizenship; whereas the LTC system does not have such a function.

Another practical explanation for this difference is that, since foreigners are much less likely to stay in a country until they become old and enter a state of disability, it would be unreasonable to require them to compulsorily participate in the LTC risk-sharing scheme. This is the reason why Korea allows foreigners to choose to opt out of the LTCI (88). However, this logic dodges the actual decisions that must be made to define the boundary of solidarity and leaves a cleavage in the system. It implies that the de facto lack of need is a legitimate reason to be excluded from or choose to leave the system. By drawing on the same reasoning, citizens with good health and a certain level of financial confidence that they will not need publicly-funded LTC in the future could also rightly argue that they have the right to waive the obligation of participation and to opt out of the LTCI.

The Scope of Interdependence

In terms of transitions, the scope of interdependence in health and LTC, despite being through several financial crises and reforms, remains relatively constant in these four countries. Services covered by the publicly-funded systems are defined by the central governments, in most

cases the Ministry of Health (or an equivalent agency). This fact reflects the centralized governance model in East Asia. Although Japan, Korea, and Taiwan have different timing and trajectories of evolution from an authoritarian state into a democratic one, their health affairs remain a highly controlled policy field. This situation gives the government a strong bargaining position over the health “market” (recall that most care providers in these three countries are private) and could encourage private care providers to meet the state’s overall health policy goals. Not to mention that, in Singapore, where the government is run by a one-party regime, state power over the health and LTC systems is also highly centralized.

In addition, one related point to be noted is that the governments of these four countries all directly subsidize their social health or long-term-care insurance. This feature is quite different from the classic social health insurance model, in which the insurance body is independent from the public sector and is funded and operated by the insured alone (11). Scholars have considered this type of health care financing and provision as a new type called National Health Insurance (89). However, state subsidies for health insurance seem to be a recent trend for countries that adopt social insurance as their major model. For example, both The Netherlands (in 2006) and Germany (in 2009) introduced major reforms of their social health insurance systems that, for the first time, included a small but meaningful national government contribution of overall operating costs (90, 91).

Lastly, although the scope of interdependence did not change much in these four countries, in the LTC sector the responsibility for care has largely remained within families. As discussed earlier, the social risk of LTC has been recognized, but this recognition does not necessarily imply that the satisfaction of LTC needs has become a social right. One might reasonably infer that the care model grounded in Confucian ethics, if any such model can be classified, would be

a way for modern states to survive the challenges brought by economic stagnation and population aging. Such a model would allow the welfare system to be maintained by a minimum amount of public funds. Nevertheless, this arrangement would require people's high trust and support for the government, delegating many aspects of their rights to governmental discretion. It could also endanger the overall stability of the society, in that it leaves individuals and families to take care of their own health and LTC needs. Under such circumstances, many people would be living in conditions that might not be acceptable for a developed democracy. Even in Singapore, where "Asian Values" are praised and practiced, the LTC system has now been reformed in a more solidaristic direction.

Conversely, in the health sector, responsibility for care has been widely allocated to the publicly-funded system, at least in Japan, Korea, and Taiwan. Some preliminary findings have shown that the individual's experiences engaging with the system and perceived system performance are two important factors (61). It could also be argued that the implementation of a solidarity-based health system could achieve such effects (61, 92). Health sector solidarity has been firmly established. Future studies could continue this track of inquiry, focusing on the mechanisms of this phenomenon and its differences with the LTC sector.

The Costs of Joint Actions

The costs involved in collective service provision (both in health and LTC) are not distributed evenly between generations. Japan, for example, is more generous to older people. This arrangement, as mentioned, has a specific context. Early in 1973, Japan initiated a "free medicine" policy that waives all out-of-pocket charges for people older than 65. This policy caused a phenomenon called "social hospitalization" – older patients who have LTC needs

occupy hospital beds because inpatient services are “free” for them (76). This policy therefore rapidly created a deteriorating financial status for Japan’s National Health Insurance program. In the following two decades, the Japanese government tried to fix this expansion of welfare to older people, implementing a series of programs that focused on regulating older people’s healthcare. Eventually, the EHCSA was passed in 2008 and the LEHI implemented in 2009, which, however, is still more generous to older generations. Scholars consider this issue to be a major mistake made by Japan’s developing health system (76) – a one-shot expansion policy promised by politicians which will take the country decades to recover from the inadequate financing and inefficient resource allocation.

Indeed, grounded on their essentially pay-as-you-go financial basis, the health and LTC systems in Japan, Korea, and Taiwan continue to transfer resources from younger to older generations, and this is indeed a key function of intergenerational solidarity. The only differences lie in different premium rates, percentages of premium contribution, and the extent to which the government uses tax money to subsidize the system. Nevertheless, this financial arrangement renders the health and LTC systems unsustainable under current circumstances, in which the presumptions of constant economic and population growth are no longer valid. In the coming future, reforms will be needed, either to cut the services covered or to raise the tax and/or premium rates. If such a scenario occurs, the existence of strong intergenerational solidarity would become vital for the continuation of health and LTC systems in these three countries.

Would a Singaporean model be a more plausible/preferable solution? Limiting health sector solidarity within families seems to be a way to limit and steer intergenerational transfer. (Note that the Singaporean government still uses tax money to heavily subsidize public hospitals; thus, in a sense, it is still transferring resources between generations in an aging society. But I leave

this issue aside for now.) However, the Singaporean model might only fit in Singapore, considering its unique environment. Singapore is a geographically small city-state; this fact allows its health and LTC service capacity to be distributed relatively evenly within its borders. In addition, Singapore's government has an authoritarian nature that keeps the transaction costs of communication and administration relatively low. Under these circumstances, a within-family solidarity health system would be applicable; or, at least, the overall care burdens are not unbearable for Singaporean citizens. Combined with its recently reformed LTCI and the subsidies to public hospitals, the Singaporean health and LTC sectors could be considered a minimally solidaristic system.

Summary

In this chapter, the actual practices of solidarity, in terms of the scope of community, the scope of interdependence, and the costs of joint action, in four East Asian countries are compared and examined. Despite their relatively similar contexts, the actual practices of solidarity differ, reflecting path dependency as well as historical legacies and policy diffusion between the health and LTC sectors.

Overall, reflecting the region's authoritarian past, the governance of health and long-term care systems is centralized in East Asia. The technocrats in the economic and health departments in the central government played a crucial role in establishing the original health systems. This developmental model is beneficial from the perspective of pursuing universal health coverage. Before people started to have a sense of common health risks and demanded the government to take action, the government took action and established the health system. The implementation of the system would then forge solidarity in health, cultivating the values of the system – e.g.

equal access to health services – among citizens. Thus the relationship between solidarity and health system is, therefore, from policy to solidarity. This argument, however, needs further evidence to support it.

The actual practices of solidarity in the LTC sector seem to stumble more. In the case of Taiwan, one possible explanation is that, after democratization, the authority of technocrats gradually decreased. The ideologies of political parties and public opinions became more relevant to the direction of policy reforms. In other words, the government could no longer establish a LTC system to share LTC risks before people demanded it. Despite the increasing LTC needs in the society, people may not demand solidaristic LTC at all for multiple reasons, such as being reluctant to pay more taxes or premiums or perceiving that the government is inefficient. This statement is of course subject to further empirical investigation; however, what is already known is that the LTCI reform modeled after the NHI in Taiwan was abruptly abandoned and was substituted by the tax-based reform of the LTC 2.0 Plan, in which families are still considered the primary care unit (69). In contrast, in Korea, the LTCI, which was also modeled after the NHI in Korea, was successfully reformed in 2008. The still authoritarian Singaporean government does not encounter this challenge. It successfully initiated a major reform in the LTC sector, establishing an ever-solidarity-inclined LTCI in Singapore.

The findings of this chapter contribute to the academic literature by providing a comprehensive investigation into the actual practices of solidarity in the health and LTC sectors in four East Asian countries. It also identifies explanatory factors for the different trajectories among publicly-funded health and LTC systems. However, several limitations need to be addressed. First, this chapter defines solidarity from a retrospective viewpoint; that is, presuming that the solidarity-based health and/or LTC systems represent the existence of solidarity. But

from this viewpoint, whether people are really willing to share health and LTC risks and to commit to carry the costs of joint actions remains uncertain. This question should be answered in any future research project in this area. Second, the contexts and histories of each country vary considerably. More detailed transitions and explanatory factors affecting each country should be subject to further investigation. What this chapter does provide is a comprehensive overview. Besides these two issues, future research could focus on comparing the inclusion criteria for immigrants when they are naturalized and become citizens. Individuals' experiences of engaging with multiple countries' health and LTC systems would also be an issue worth studying, for solidarity is forged and reforged when encountering impacts from comparisons between different ways of life. Inter-continental/cultural comparisons are also needed.

Lastly, there are several takeaway points for policymakers to consider. Suppose national policymakers are thinking about proposing a reform project in a democratic polity. First, this means that they are already in an era following the country's process of democratization. The results from the Taiwanese data suggest that, potentially, a solidaristic health or LTC reform may not necessarily be welcomed by the public. Policymakers will have to either take the public's understanding and construction of risks into consideration, or manage to convey their own construction of these risks and hence the resulting reform project to the public. This is a classic paradox of policy-making in a democracy, framed in the eighteenth Century by Jean-Jacques Rousseau as the distinction between the "will of the people" as against the "general will" (93). Are these policymakers/government to represent the people's expressed preferences or instead to act on behalf of the people, even though those decisions might be contrary to the population's expressed will? At some point in the policy-making process, policymakers will need to provide an answer to this question. For policymakers in not-so-much democratized countries, they might

waive the necessity to answer this question. They could also take advantage of centralized power in their not-democratic government to put their ideal reforms in place. This approach, however, needs support from political leaders (“strong persons”) as well as a corresponding level of state capacity. Experience in Taiwan and Korea have shown that this approach, with proper conditions, can also lead to highly efficient and effective universal health systems.

Second, policymakers could consider the role of family in providing informal care to those in need. Intuitively, there seems to be no place for family in a solidaristic health or LTC system, since solidarity is considered to be an institutionalized sentiment and commitment to not-significant others, meaning those who do not have a specific relationship with a person. Solidarity presumes that, simply by being equal and reciprocal citizens, or fellow members of a political community, people are entitled to needed care services covered by the health or LTC system. However, given the experience in East Asia, countries do not need to stretch the scope of interdependence to that comprehensive extent. Families can still have a major role in care provision. Not only in LTC, but also in healthcare, family members provide bed side daily life and emotional support. This strategy, as well as people’s expectation, might be a key factor in explaining how East Asian countries maintain their health systems with relatively low public expenditures and high overall efficiency. The capacity of inform care-giving being subject to a society’s norms and values, policymakers could take advantage of it to secure a pathway with the least obstacles to reform. Again, the purpose of reform, then, goes back the first point discussed above.

Third, policymakers many want to rethink current pay-as-you-go (PAYGO) financial arrangements in health and LTC systems. This is the core debate of the sustainability issue, for PAYGO presumes the constant growth of both population and economy, which, in most of the

developed countries, is no longer the case. If these two presumptions cannot be met, then the PAYGO framework will require strong intergenerational solidarity if future generations are to acknowledge the uneven financial burdens put on them. This is beyond the discussion of the costs of joint action in this dissertation. However, we could observe that none of the East Asian countries have addressed this problem, and we could hence reasonably infer that rather difficult intergenerational relationships might be awaiting them. Policymakers in the developing world may want to take this structural dilemma into consideration when building or reforming their health and LTC systems.

Table 1. Population aging in the four East Asian countries

	Japan	Taiwan	S. Korea	Singapore
65 years old or older (%)				
in 1960	5.73	2.47	3.74	2.04
in 2010	22.96	10.69	11.08	9.01
in 2060	36.89	39.27	37.04	32.37
Demographic transition (years)				
65+ from 7% to 14% of total pop.	24	24	19	22
65+ from 14% to 20% of total pop.	11	8	8	9

Source: (94, 95)

Table 2. The three components of solidarity

Components
A psychological sentiment shared by a group of interdependent people
A source of political commitment to take joint actions
The three factors: <ol style="list-style-type: none">1. The scope of the community of mutual recognition (Who counts as one of 'us'?).2. The scope of interdependence (What are people committed to?).3. The costs of joint action (What and how much does one have to give up?).

Source: (3, 5)

Table 3. Summary of the actual practices of solidarity in health and LTC sector in four East Asian countries

Sector	Japan		Taiwan		Korea		Singapore	
	Healthcare	LTC	Healthcare	LTC	Healthcare	LTC	Healthcare	LTC
Basic model	Decentralized	Decentralized	Centralized	Centralized	Centralized	Centralized	Centralized	Centralized
	SHI with tax subsidy	Social LTCI	SHI with tax subsidy	tax-based program	SHI	Social LTCI	regulated personal medical account	tax-based program
Year of establishment	1922 The first social insurance (labor) 1961 Universal social health insurance	2000 LTCI	1958 Labor Insurance Act 1995 NHI	2007 LTC 1.0 2017 LTC 2.0	1977 The first social insurance 2000 Universal National Health Insurance	2008 LTCI	1984 Medisave 1990 MediShield (may opt-out) 1993 Medifund 2015	2002 ElderShield for 40+ years old (voluntary, privately run, may opt out) 2020 LTCI CareShield

	2008 Elderly Health Care Security Act (EHCSA)							MediShield	Life for 30-40 years old
	2009 Late Elder's Health Insurance (LEHI)							MediShield)	(compulsory, gov run, will replace Eldershield) (citizens born before 1979 could choose; healthy citizens born b/t 1970-1979 will be automatically transferred)
Agency in	Local multiple	Local multiple	Single-payer	MOHW and	Single-payer	Single-payer	Central		ElderShield

charge of administration	insurers (N=3,000)	insurers	NHIA (gov)	LTC Management Centers in local governments	NHIS	NHIS	Provident Fund Board (gov)	Three private insurers appointed by the Ministry of Health CareShield Life Ministry of Health
The scope of community*	Citizens and foreigners	Citizens and foreigners (with resident card and stayed for more than 3 months)	Citizens (with household registration) and foreigners (employed or have residency)	Citizens (with household registration)	Citizens and foreigners (since 2006)	Citizens and foreigners (may opt-out since 2009)	Individual citizens and their families	Citizens

			for more than 6 months)					
Age	No age limit LEHI for 75+	40+ start to pay premium 65+	No age limit	65+ Indigenous peoples 55+ Severe dementia patient 50+	No age limit	65+ Those with age-related debilitating conditions have no age limit	No age limit	ElderShield for 40+ CareShield Life for 30-40
The scope of interdependence	Services listed in the fee schedule	Services listed in the fee schedule	Services listed in the fee schedule	Services supplemental to family care	Services listed in the fee schedule	Services listed in the fee schedule	Inpatient services, selected outpatient treatments	Eldershield: Cash benefits for up to 72 months Careshield: SG\$600/mo. of cash

								benefits as
								long as
								disabled
The cost of	EHI 10%	Decided by	4.69% wage	Tax revenues	6.24% wage	6.55% of NHI	Medisave	ElderShield
joint action	wage	municipal	income	(US\$ 1.57	income	50%	8-10.5% wage	Fixed amount
	50% Employer	insurers	1.91%	billion/yr.)	50% Employer	Employer	depending on	of annual
	50%		additional		50%	50%	age	premium
	Employee		income		Employee	Employee	MediShield	ranges from
	NHI		60% Employer				Life	SG
	7.3-15.9%		30%				Fixed amount	\$174.96-\$254
	50% Gov		Employee				of annual	0.99
	50% Self		10% Gov				premium	depending on
	LEHI						ranges from	age and sex
	50% Gov						SG\$540-\$119	Careshield
	40%						0 depending	Fixed amount
	EHI+NHI						on age	of annual

		10% Self, from pension						premium of SG\$212 with gov subsidy depending on age and sex (payable from Medisave)
OOP	10-30%	10% 20% (those with higher income)	Fixed amount US\$5.7-\$14 inpatient (varied by levels of provider) 5-30% outpatient (varied by	16% (5% for middle-to-low income household, 0% for low income household)	20% inpatient 30-60% outpatient with a ceiling	20% institutional 15% home	OOP will be required when the charges exceeds the fixed amount of withdrawal limit applied to each level of inpatient	OOP will be required when the charges exceeds the fixed amount of monthly pay-outs SG\$600

			days of				and outpatient	
			admission)				services	
			with a ceiling					
Trends of the	From	One-shot	From	From	From	From	Basic structure	One-shot
transitions of	occupational-b	expansion for	occupational-b	subsidized	occupational-b	subsidized	not changed	expansion for
actual practices	ased	all residents	ased	social	ased	social	Limited	citizens
of solidarity	insurances to		insurances to a	assistance	insurances to a	assistance	add-ons	
	universal SHIs		universal NHI	programs to	universal NHI	programs to		
	(still			tax-based		universal		
	occupational-b			universal		social LTC		
	ased)			citizenship		insurance		

Note: *If not otherwise noted, all “citizens” label in the table includes permanent residents.

Source: Summarized by the author.

Appendix: Materials included for analysis

Material title [Original title in other languages]	Material type	Ref.*
Japan Health System Review	International organization: Asia Pacific Observatory on Health Systems and Policies, World Health Organization	(75)
Korea Health System Review	International organization: Asia Pacific Observatory on Public Health Systems and Policies, World Health Organization	(84)
NHA indicators, Global Health Expenditure Database	International organization: World Health Organization	(79)
National Health Expenditure Taipei [In Taiwanese Traditional Chinese: 國民醫療保健支出]	Government: Ministry of Health and Welfare, Taiwan	(80)
The Ten-Year Long Term Care Plan 2.0 Prospectus [In Taiwanese Traditional Chinese: 長期照顧十年計畫 2.0 (106~115年) (核定本)]	Government: Ministry of Health and Welfare, Taiwan	(68)
National Health Insurance in Taiwan 2018-2019 Annual Report	Government: National Health Insurance Administration, Ministry of Health and Welfare, Taiwan	(56)
CareShield Life	Government: Ministry of Health, Singapore	(83)

Number of Hospital Beds	Government: Government of Singapore	(78)
National Health Insurance Act & Act on Long-term Care Insurance for Senior Citizens.	Government: National Health Insurance Corporation, Korea	(85)
Japan's Health: Institution and Policy [In Japanese: 日本の医療—制度と政策]	Book	(76)
Healthy Democracies: Welfare Politics in Taiwan and South Korea	Book	(6)
Affordable excellence: the Singapore healthcare story: how to create and manage sustainable healthcare systems	Book	(77)
Analyzing the Practice Model of Korea Long Term Care Insurance [In Taiwanese Traditional Chinese: 長期照顧保險: 韓國模式論析]	Book	(88)
Singapore, in Comparative Health Policy In The Asia Pacific	Book chapter	(82)
Japanese universal health coverage: evolution, achievements, and challenges.	Journal article	(74)
Long-term care system in Taiwan: the 2017 major reform and its challenges	Journal article	(69)
Evolution of Taiwan's health care system	Journal article	(50)
Long-Term Care Policy: Singapore's Experience	Journal article	(70)
Farewell to old legacies? The introduction of long-term care insurance in South Korea	Journal article	(87)

The National Health Insurance system as one Journal article (89)

type of new typology: the case of South

Korea and Taiwan

Culture is destiny: A conversation with Lee Magazine (81)

Kuan Yew

Note: *For full publication information of each piece of material, please see the number listed in the Ref. column and find the corresponding source in the REFERENCES section.

CONCLUSION

This dissertation has sought to examine and assess the relationship between the concept of solidarity and the development of publicly-funded health and long-term care systems in East Asia. In Chapter 1, the historical and political origins of health sector solidarity in different historical periods in Taiwan are analyzed. Through the theoretical analysis of the boundary problem of solidarity, civic nationalism and a newly-developed concept – ethos of common life – are drawn as the ethical origins for solidarity in the National Health Insurance system in Taiwan.

In Chapter 2, the relationship between solidarity and public attitude toward Taiwan's health system is analyzed by examining the survey data. A significant relationship is identified. However, the relationship between solidarity and a willingness to pay more to enhance care quality is moderated by age cohort, only appearing in the young- to middle-age cohort. The relationship between solidarity and supportive attitude toward the government's role in health provision is moderated by gender, only appearing in the female population.

In Chapter 3, a comprehensive overview of the actual practices of solidarity – the scope of community, the scope of interdependence, and the costs of joint action – in health and long-term care systems in Japan, Korea, Taiwan, and Singapore is presented and analyzed through a comparative approach. The differing actual practices of solidarity reflect the path dependency and policy diffusion between the health and LTC sectors in the four countries. Despite these differences, centralization of governance of health and LTC affairs is a prevailing feature in East Asia. This feature allows the establishment of solidarity-based health systems without the citizenry actually having a sense of solidarity in health and demanding that the government take action. In other words, the policies themselves are cultivating

people's solidarity.

The relationship between solidarity and health and LTC systems is complex and dynamic, depending on the specific context of each society. When ethical origins are more legitimate, justifiable, and plausible, a publicly-funded health and/or LTC systems could be more sustainable, as people genuinely commit to the programs. Preliminary empirical findings have shown the significant relationship between solidarity and people's support for the system. Comparative analysis provides a comprehensive view of the trends and features in East Asia. For policymakers and reformers, solidarity is a concept of which they should be continually aware. The people's sense of solidarity in the health and LTC sectors should be monitored and, if possible, cultivated, if the welfare arrangements in health and LTC in East Asia are to be made more broadly sustainable.

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