

Doctoral Thesis

博士論文

STUDY ON THE FEASIBILITY OF IMPLEMENTING BASIC
INCOME (BI) IN ASIAN RURAL CONTEXT:
CASE STUDIES OF CHINA AND JAPAN

(アジア農村部におけるベーシックインカムの実施可能性
に関する研究 ー中国と日本を例としてー)

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楊 嘉其

Yang Jiaqi

Graduate School of Frontier Sciences

The University of Tokyo

ABSTRACT

Rural areas in Asian countries such as China and Japan are challenged by population decline. Sustaining the function of rural areas requires a certain amount of rural population. In accompany with the visions in a sustainable rural society where people are expected to live, an appropriate rural social system provided by the government is essential to keep an appropriate amount of population in rural areas.

The key originality of this research is to link basic income (BI), which is defined as a periodic cash payment unconditionally delivered to all on an individual basis without means-test or work requirement, to holistic approaches toward the development of sustainable rural society. Based on the concerns on BI as an approach to the future social transformation in the human society, the overarching motivation of this research is that BI may contribute to keeping an appropriate amount of rural population in China and Japan by reshaping the meaning of work, employment and lifestyle, the structure of the local economy and social security system in the rural context. Whether BI could be feasibly implemented is thus a key question for any discussion promoting BI into policy and economic agenda, and it should be investigated corresponding to the governance system and the social-economic status. So far there is a lack of studies touching upon the question above.

This research aims to investigate the feasibility of implementing BI in the rural context, taking China and Japan as two case studies. Three research objectives are formulated as follows: 1) to calculate the cost of implementing BI in rural context at the municipal level, 2) to investigate the attitudes of key stakeholders involved in the policymaking process toward BI in the rural context and 3) to provide strategies on

enhancing the feasibility of BI in the rural context of China and Japan corresponding to the opportunities and challenges embedded in the governance system and the social-economic status of the two countries respectively.

An intensive literature review on BI theories including the BI definition and potential impacts of BI on the human society and 15 selected BI empirical cases around the world was conducted in Chapter 2.

Chapter 3 estimated the cost of implementing BI in the rural context of China and Japan at the municipal level, taking rural Ganzhou and Sado as two case studies. Secondary data about the public finance of local government in rural Ganzhou and Sado were used for the cost estimation. Taking the adjustment on existing policies into consideration, it was estimated that the implementation of BI at present would annually cost 1.2 billion USD to 1.6 billion USD in rural Ganzhou. Meanwhile, the annual cost of implementing BI in Sado was estimated at from 231.0 million USD to 294.4 million USD. The result implies that if BI was currently implemented in rural Ganzhou or Sado, a huge financial deficit would be created, which largely increases the public finance expenditure of the local government immediately. BI is argued not affordable merely based on the current capacity of local public finance in rural Ganzhou and Sado.

Chapter 4 and Chapter 5 aim to address the objective 2. Chapter 4 quantitatively investigated the public attitudes toward the implementation of BI and the factors influencing their attitudes in the context of rural Japan, taking the Hokuriku region as a case study. An online survey was conducted among 1,028 local residents in August 2019. Through cross-tabulation analysis and chi-square test, it is found that from the perspective of self-interest, the attitudes toward BI varied among the surveyed respondents with different age and income, family structure, interest in participating in

non-market activities and employment status, due to concerns about the gains and loss from a trade-off selection between BI and existing policies it would replace. From the perspective of individual value, the public attitudes toward BI are significantly influenced by the perception on the future vision of society created by BI. The findings about the factors influencing the public attitudes toward BI identified in the chapter were used in the discussion on the feasibility of three scenarios proposed in Chapter 3 for the case of Sado. It is argued that compared with the other two scenarios, the scenario 3 (SS3) giving all adult residents between 20 to 64 years old a full BI is relatively more feasible to be implemented, due to a comprehensive consideration of the estimated cost of BI and public attitudes in Sado toward this policy.

Chapter 5 investigated the attitudes of the local government in the rural context of China through qualitative approaches. Taking rural Ganzhou as an example, 4 interviews and 3 group discussions on officials of the local government of Ganzhou at different levels and a member of the Ganzhou political consultative conference were conducted during September 2019. The result from discourse analysis shows that the local government of Ganzhou considered that BI would potentially bring both positive and negative impacts on rural Ganzhou from the social, economic, and political perspectives. The general attitudes of the local government toward BI at present is interpreted not positive due to several constraints including the risk on the stability of rural society, controversial impacts on the rural economy, radical attributes of BI, limited financing capacity as well as limitation to initiate policy reform without authorization from the superior government. Key points for addressing the constraints above were proposed correspondingly.

Based on the findings from the previous chapters, Chapter 6 overall discusses the

opportunities, challenges, and strategies on enhancing the feasibility of implementing BI in the rural context of China and Japan. BI and the existing national rural policy frameworks in each of the two countries is argued reciprocally interlinked with each other, which provides grounds for practically promoting the debates on the implementation of BI into policy agenda. However, limited public financial resources of local government and features of the policymaking process determine that BI is difficult to be initiated from the grassroots as a local policy in the rural context of China or Japan. Correspondingly, a top-down approach from the national level is anticipated as a strategy to enhance the implementation of BI in the rural context. Furthermore, strengthening the development of local economy and industries and diversifying fundraising methods are essential to secure the financial source on BI. Finally, modification and innovation on the approach of BI are also required in the practices which further expand the current BI definition. In this chapter, it is argued that compared with the democratic governance system, the communist governance system is more feasible to implement the above rural social system. Moreover, different proposals of BI are recommended for the rural context of China and Japan respectively, according to the differences in the governance system and the social-economic status in the two countries. Chapter 7 summarizes and concludes the entire thesis.

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Chapter 1. INTRODUCTION

1.1. Research background: population decline and its impacts in rural China and Japan

In accompany with the urban population growth due to the economic development and urbanization, Asian countries, such as China and Japan, commonly faced with the population decline in rural areas. The rural population both in the context of Japan and China commonly refers to those whose places of residence are not categorized as urban areas. As shown in Figure 1-1 (a), In Japan, the rural population constantly declined for several decades from 52.59 million (56.3% of the total population) in 1960 to 40.22 million (31.7% of the total population) in 2015. A key reason is considered to be the rural-to-urban migration. After the world war II, the migration of rural residents to urban areas in the context of Japan is considered divided into three phases, which are the period of high economic growth between the 1960s to 1970s (phase 1), the period of bubble economy between 1980 to 1993 (phase 2) and the period of the decline of the local economy and local employment since 2000s (phase 3) (Masuda, 2015). Currently, the concerns on the population decline are interlinked to the over-concentration of the population in Tokyo due to the migration of the young generation from rural areas.

In China, rapid economic development and urbanization since the reform and opening-up in the 1980s led a large number of rural residents to migrate to urban areas to find jobs for making living. Consequently, after the rural population reached a peak in 1995, the number has constantly reduced nearly 3 billion since then until 2018. The ratio of rural population to the total population also reduced by 40.2% from 1980 to 2018.

Rural depopulation widely drawn public attention both in Japan and China as it causes diverse constraints on sustaining the existence of rural areas, despite the economic development and urbanization of the two countries are in the different phases.

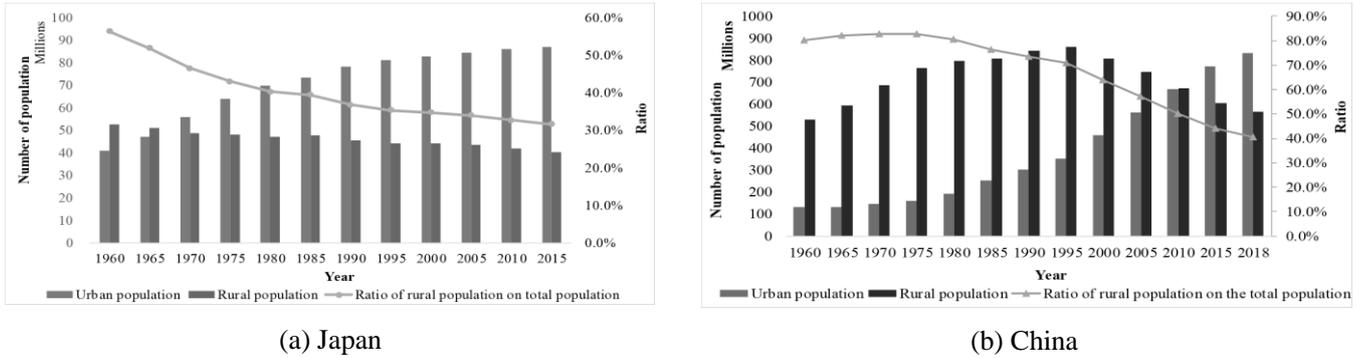


Figure 1-1 The rural population trend in Japan and China

Constructed by authors based on the data from Japan National Census H27 (2015) for (a) and the data from the National Bureau of Statistics of China (No date) for (b)

In Japan, rural depopulation is considered to trigger the shrinking of the local economy. As shown in Figure 1-2, the provision of diverse services and utilities in a certain area usually requires a certain scale of the local population. In rural areas with population declined, it is difficult to sustain the provision of many life-related services such as supermarkets, restaurants, and hospitals, which would consequently lead to the decline of local employment.

Rural depopulation also causes difficulty to maintain local administrative services and public transportation, which would consequently hinder life convenience. Meanwhile, the attractiveness of rural areas would be lowered due to the appearance of abandoning farmland and empty houses, of lacking human resources for managing various community organizations and of local school consolidation. All the issues mentioned above are considered further deteriorate the population decline in rural Japan (See Figure 1-3). The arrivals of ghost boats from North Korea on an uninhabited island in Hokkaido

in 2017 also implies that loss of population in remote rural areas would even hinder the national board security.

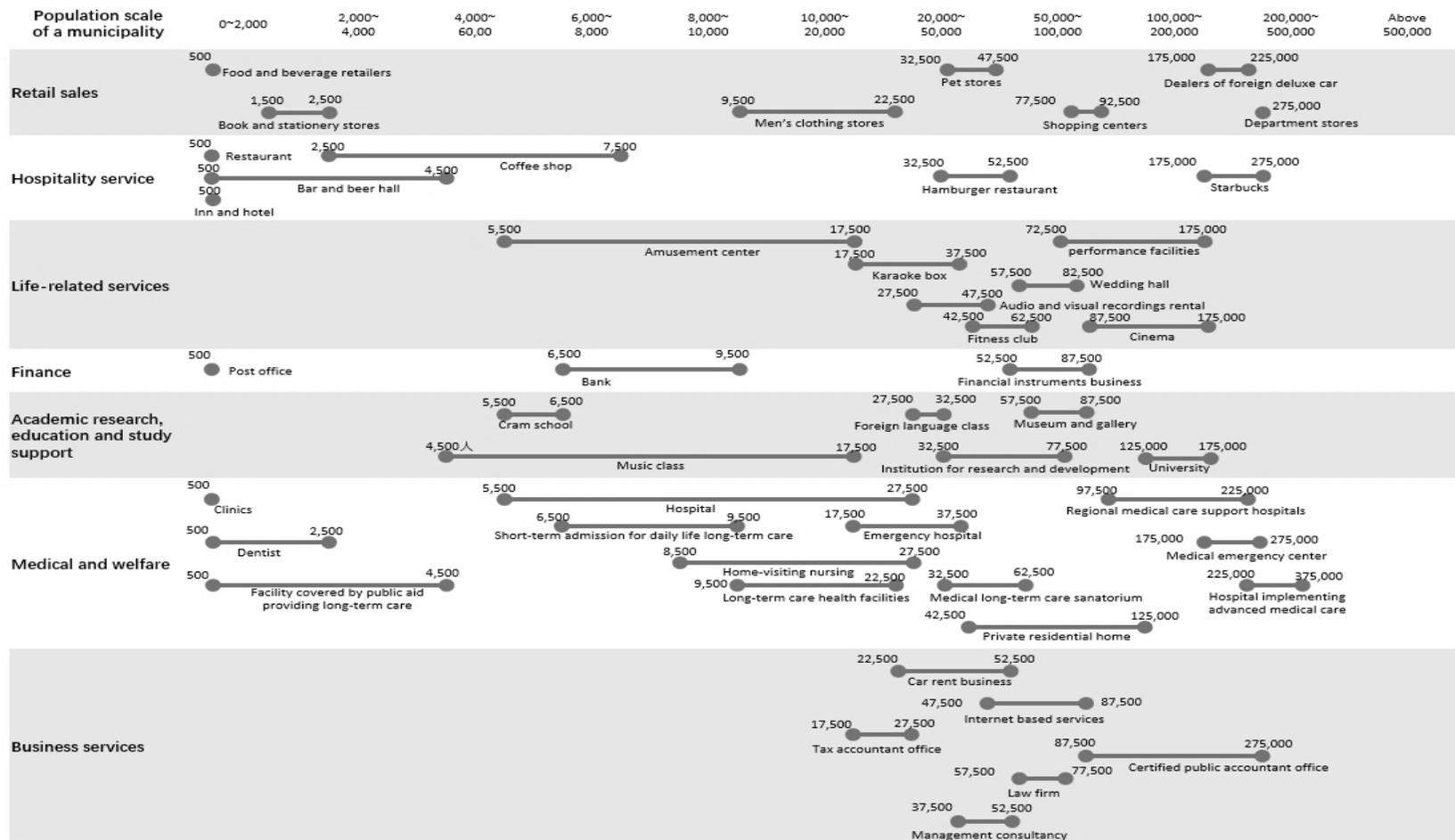


Figure 1-2 The appearance of public utilities and population density in Japan

Reproduced and translated by the author based on White paper of Land, Infrastructure and Tourism 2015 (Japan Ministry of land, Infrastructure and Tourism, 2015)

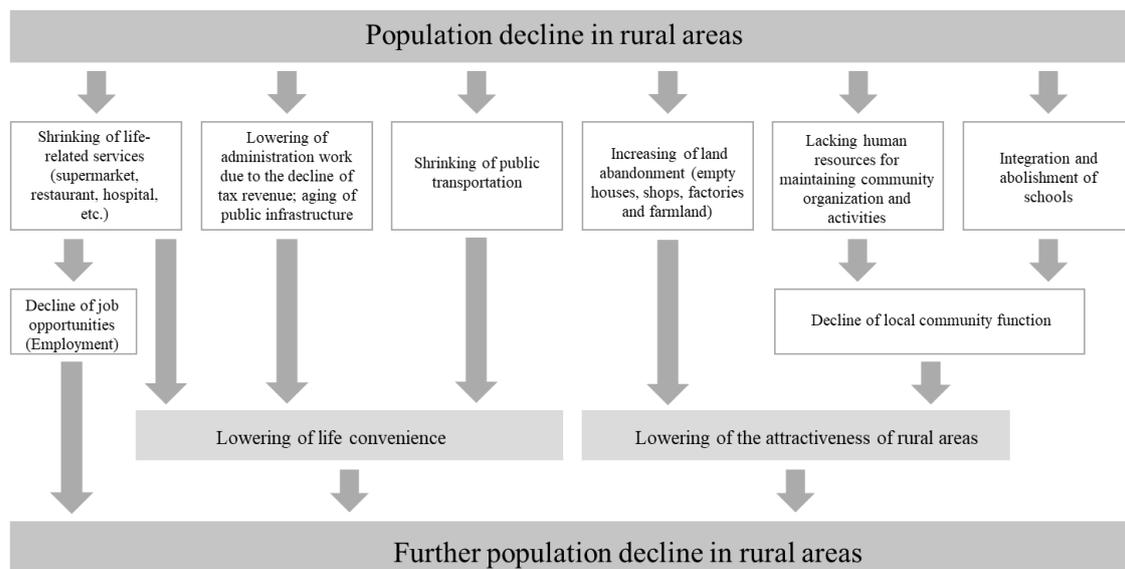


Figure 1-3 Conceptual flow of the impact of rural depopulation on rural society in Japan
 Reproduced and translated by the author based on the White paper of Land, infrastructure and tourism 2015 (Japan Ministry of Land, Infrastructure and Tourism, 2015).

In China, despite the current trend of rural population decline is considered an inevitable consequence due to the transformation of rural labors from the agricultural sector to non-agricultural sectors during the economic development, the appearance of rural hollowing villages and abandonment of farmland or house site has been drawing the public attention (Xie, et al 2014; Liu and Liu, 2016). Rural depopulation is considered an economic incentive triggering the shrinking of rural education and the medical system (Song, 2016). As adults in rural households have to migrate to urban areas to find jobs and support the livelihood of their parents or children left in rural areas by sending allowance to them. Consequently, left-behind children and empty-nest elderly (Chang et al., 2011) are quite commonly happening in the rural context of China. Considering the insufficient social security system and medical care system in rural areas, caring for these vulnerable groups by providing food security, medical care, and education, is considered challenges for rural governance in China nowadays.

1.2. Missing points in the existing policies attracting population to be in rural areas in China and Japan

Lacking job opportunities in the local labor market drives the outflow of migration from rural areas to urban areas both in China and Japan. Therefore, ensuring local employment is a prerequisite for keeping the population living in rural areas. Furthermore, previous studies found out that quality of life determined by, for example, the natural environment and work-life style in rural areas is the main motivation driving people to migrate to rural areas (Powe 2007; Bijker et al., 2012). Attachment on hometown and residence are also identified (Lee and Sugiura 2018) as factors motivating people originally from rural areas move back to hometown.

In Japan, the existing policies attracting people to be in rural areas in line with the academic discussion above. Aiming to promote the decentralization of population and correcting the over-concentration of the population in Tokyo, the Japanese national government legislated the Act of “Overcoming Population Decline and the Vitalizing Local Economy” in 2015. In the General Strategy of Overcoming Population Decline and Vitalizing Local Economy (Machi Hito Shigoto Sousei Sougou Senryaku) released in 2019 (Cabinet Office of Japanese Government, 2019), alleviating the decline of the rural population is included in the general vision of the National Plan for Rural Revitalizing to build a prospering rural society. Correspondingly, four basic goals are to 1) allow people feel at ease to work while making rural areas rich , 2) establish the connection to the rural areas and create new population inflow trend to rural areas, 3) achieving the wish of getting married, giving birth and raising children and 4) making the local areas attractive by allowing people to come to gather and enjoy life. Under the

law of overcoming population decline and vitalizing the local economy, local governments have been authorized to develop relevant policies for achieving the goals above with more flexibility according to the situation of local areas respectively. Furthermore, the strategies for rural rev are also combined with the concept of Society 5.0 raised by the Cabinet Office of the Japanese government raised in the 5th Science and Technology Basic Plan that Japan should aspire to. The Society 5.0 is defined as a human-centered society that balances economic advancement with the resolution of social problems through high integration of cyberspace and physical space (Cabinet Office of Japanese Government, 2020). Correspondingly in the rural context, the utilization of future technology is expected to enhance the attractiveness of rural areas. The utilization of artificial intelligence and big data are applied to address various issues the local education, medical care, life, economy, and public infrastructure management due to the decline of the rural population (Cabinet Office of Japanese Government, 2019).

In China, the decline of the rural population is considered still ongoing in future accompanying with the urbanization. So far it has not yet been perceived as a key issue in the rural context at the national level. However, urging people who migrating out from rural areas to return to hometown for starting local business is included the national strategies of rural revitalization released by the Chinese national government in 2018. Furthermore, President Xi Jinping pointed out in the 19th National Congress of the Communist Party of China that the principal contradiction faced in the current Chinese society is between unbalanced and inadequate development and the people's ever-growing needs for a better life (the State Council of China, 2017). In terms of rural revitalization, technical innovation is expected as a vital approach to promote social and

economic development in rural areas, which may lower the migration from rural areas to metropolitans by alleviating the rural-urban disparity.

A key question missing in the strategies aiming to attract migration to rural areas is that what the purpose and content of work for a human would be in the rural context, given the current jobs in rural areas would be gradually substituted by machines, AI or automation, as described by the concept of Society 5.0 for example. Meanwhile, another question would be what people should do in the newly generated leisure time and this would significantly be linked to reshaping the employment and lifestyles in the rural context. A fundamental question to maintain the rural population would be for what purpose people chose to live in rural areas or what roles humans should take in rural areas and how it is different from in urban areas. The answers to all of the questions mentioned above have not yet clarified in the existing strategies.

Furthermore, the recent global COVID-19 pandemic that happened recently in 2020 also exposes the vulnerability of the current social and economic structure as it has been observed that many people both in the global north and south suffered in surviving due to the lack of source of income after losing their jobs.

An appropriate social system provided by the government is of importance to provide economic incentives for driving successive development towards the target found by the society (Takeuchi and Fukushi, 2011) in rural areas. That is to say, the fundamental redesign of current rural social systems is essential for the maintenance of the rural population if it is considered as a target by the rural society. Furthermore, Corresponding to the key questions missed in the existing strategies for maintaining the rural population mentioned earlier, I shall argue three necessary elements embedded in the future vision of a sustainable rural society where people are willing to live in and these

elements are expected to be achieved by such social system. First, work and employment in rural areas should be for more than mere financial purposes in the rural context. A sustainable rural society shall provide people opportunities to challenge whatever they would like to try. These challenges should be allowed to contain no economic value but for example, with cultural value embedded. Sometimes, the challenges could also be not economically profitable at all at the beginning but maybe economically valuable in a long term perspective. To achieve this, a universal security scheme ensuring rural residents' livelihood is of necessity. Second, the common pattern for rural households in developing countries, such as China, to maintain their livelihood nowadays should be criticized that adults have to earn income in the urban areas and send allowance to their children and old parents in the rural areas, as it takes for granted that families cannot live together. In a sustainable rural society, rural residents should not be forced to live separately from their families due to economic concerns on making living. It may require to ensure the income of rural residents in advance to fulfill this condition. Third, a key point to reshape the meaning of work and employment and sustain revitalization of the rural economy is to ensure that the innovation can be easily triggered for creating new value in the rural context. All of these goals are expected to be achieved through a successive development and thus an appropriate social system (Takeuchi and Fukushi, 2011) is expected to be provided by the government to drive the development.

1.3. Basic income (BI): A approach toward a sustainable rural society where people expect to live

As the key originality of this research, I argue that basic income (BI), which is defined as a periodic cash payment unconditionally delivered to all on an individual

basis without means-test or work requirement (BIEN, no date), could be a potential approach in the rural social system for maintaining rural population.

BI is not a new concept and its theoretical basis could retrospect to the work on redistributive justice centuries ago. The resurgence of the widespread attention on BI in recent years is with increasing concerns on newly-appeared topics bring social and economic transformation at the contemporary time one of the approaches contributing to addressing the technical unemployment (Caputo and Lewis, 2016; Pulkka, 2017). It is considered that BI can encourage labor while improving their quality of life by taking advantage of the benefits from technology innovation (James, J Hughes, 2014). Meanwhile, in the field of sustainability, BI is considered a necessary part of strategies adapting to sustainable de-growth (Kallis, 2011; Schneider et al., 2010). Until now, various conceptual impacts that BI could bring on the human society from social, economic, and policy-and-governance aspects have also been being constantly raised in the academic debates.

On the other hand, trails on putting the idea of BI into actual implementation was once conspicuous from the 1960s until the beginning of 1980s in the United States and Canada, as several negative income tax (NIT) experiments were launched at the moment for understanding how families adjust their labor supply in response to an NIT (Robins, 1985). One of the latest attempts is that a national referendum on implementing a national-wide BI, although it was rejected in the end, was held in Switzerland in 2016. A national-wide BI experiment launched in Finland in 2017. BI has also received support from entrepreneurs in Silicon Valley and even appeared as a campaign goal in the 2020 presidential nomination in the United States.

Considering the diverse potential impacts of BI on human society and what has been proposed in the vision of a sustainable rural society, the overarching assumption of this research is that BI is theoretically able to contribute to the maintenance of rural population by reshaping the purpose and content of work, employment and lifestyle, the structure of local economy and industries, and social security system in the rural context.

1.4. Research gap in the studies on the feasibility of implementing BI

Whether BI could be feasibly implemented in a given context is a key question to be addressed at first for any discussion promoting BI into policy agenda. Several research gaps remain when investigating the feasibility of implementing BI. The first one is that the feasibility of implementing BI would possibly be influenced by the governance system. So far despite BI has been widely discussed in democratic countries (Jordan 2012; Opielka 2008), it has not yet been implemented as a formal policy in any of the above countries. Meanwhile, most of the BI pilot projects or experiments in democratic countries usually lasted merely for several years. A key reason for the above facts is considered that as a radical policy reform (De Wispelaere and Stirton, 2007), the implementation of BI requires a long-term plan which, however, is difficult to be ensured in a democratic governance system. Correspondingly, Communism governance with a robust top-down approach could become one possible solution to the above concerns.

Secondly, when applying BI into any given context, the social-economic status of that context would also affect the feasibility of its implementation. It would determine the cost of BI and whether it is affordable for the public finance in that given context. While

BI opponents criticized that BI would cost too much, BI supporters defended that such critics often ignore the saving and other aspects with the implementation of BI and is often lack of numerical justification (Pereira, 2017). The calculation on the cost of BI should be conducted with the consideration of the specific change brought by BI on the existing policies and tax system of any given local-level context. For BI in the rural context, the replacement of the existing policies and the tax system would be fundamentally relevant to the social-economic situation of that given context.

Furthermore, how the stakeholders involved in the policymaking process perceive BI is also essential to determine the feasibility of implementing BI. Such key stakeholders might vary among different governance systems. Relevant to the BI in the rural areas, the attitudes of local residents would be essential to determine the implementation of BI under a democratic governance system. Despite BI is not considered as a governance-context specified policy, the discussion on its implementation often occurs in contexts with democratic governance system in the previous studies. The attitudes of the public involved in the policymaking are also investigated in the previous studies within the Nordic context (Bay and Pedersen, 2006; Andersson and Kangas, 2002). However, such investigation on the public acceptance on BI in the existing studies are remaining in a general sense and have not explicitly considered a trade-off selection from the public on between BI and existing policies potentially changed by BI. Furthermore, in a country with a communist governance system, such as China, an important determinant of whether BI could be implemented in a certain rural area is the attitude of its local government toward this policy. The overarching hypothesis of this study is thus clarified that the feasibility of implementing BI in rural areas in a given context would be influenced by its governance system and the social-economic status.

1.5. Research aim and objectives

Give all these above, this research aims to investigate the feasibility of implementing BI in the rural context, taking China and Japan as two case studies. With no intention to touch upon where exactly BI should be implemented in China or Japan at the national level, this research is limited to investigate the feasibility of implementing BI in rural context from a local perspective.

The reason to choose Japan and China as two case studies for investigating the feasibility of BI is that these two countries representing two different governance systems. While Japan represents a democratic governance system, China is a typical example of a communist governance system. Second, China and Japan are in the different phases of economic development and urbanization, as the former one is a developing country while the latter one is a developed country. The differences in the social and economic status, including, for example, income level and social security system, may eventually affect the feasibility of BI in the rural context. Besides, taking China and Japan as two case studies areas in this research would provide practical evidence to policymakers of the two countries for deciding policy agendas to address the rural issues mentioned in this chapter.

Three research objectives are formulated as follows:

- 1) estimate the cost of implementing BI in the rural context at the municipal level,
- 2) investigating the attitudes of key stakeholders involved in the local policymaking process by surveying on the local public attitudes on BI in rural Japan and interviewing on the perception of local government in rural China

3) provide strategies on enhancing the feasibility of BI in the rural context in China and Japan corresponding to the opportunities and challenges embedded in the governance system of the two countries.

The significance of this research is to apply BI into a rural context and study its feasibility. The outcomes of this research are valuable for stakeholders to implement BI in diverse rural contexts featured with different social-economic status and governance systems.

1.6. Structure of the thesis

The structure of the whole thesis is shown as follows (See Figure 1-4). Chapter 2 will elaborate in detail about the BI theories and BI empirical cases discussed in the existing literature by intensively reviewing the literature in the field of BI. BI theories include the definitions of BI and the conceptual impacts that BI could bring to the human society, which discussed in the academic literature. The elaboration of BI empirical cases contains the key information of the implementation and identified outcomes of 15 commonly discussed BI empirical cases. Chapter 3 addressed the objective 1. In this chapter, the cost of implementing BI in the rural context will be calculated at the municipal level. Rural areas in Ganzhou City (Shorted as rural Ganzhou), Jiangxi Province, and Sado city (Shorted as Sado), Niigata Prefecture are selected as two cases representative to the rural context of China and Japan respectively. The objective 2 is respectively addressed in Chapter 4 and Chapter 5. Chapter 4 will quantitatively investigate the public attitudes toward the implementation of BI in the rural context and the factors influencing their attitudes through a questionnaire survey of 1083 local residents from the depopulated areas in Niigata Prefecture in 2019. In

Chapter 5, the local government in China on the implementation of BI in the rural context will be investigated through qualitative approaches. Interviews and group discussions are conducted among officials from the municipal and county governments in Ganzhou. Based on the findings from the previous chapters, Chapter 6 overall discusses the opportunities and challenges of implementing BI currently in the rural context in Japan and China. Furthermore, strategies on enhancing the feasibility of BI in the rural context in both of the two countries are also proposed. The final chapter summarizes and concludes the entire thesis.

Chapter 1 Introduction		
Chapter 2 Literature review: Current status of basic income (BI) theories and empirical cases		
Chapter 3 Estimation on cost of implementing BI at the municipal level in rural context of China and Japan	Chapter 4 Investigation on the local public acceptance on implementing BI in rural context of Japan	Chapter 5 Investigation on the perception of local government on implementing BI in rural context of China
Chapter 6 Discussion: Opportunities, challenges and strategies on enhancing the feasibility of BI in rural context of China and Japan		
Chapter 7 Conclusions		

Figure 1-4 Thesis outline

Chapter 2. LITERATURE REVIEW ON THE CURRENT STATUS OF BASIC INCOME (BI)

2.1. Definition of BI

The idea of BI was originally generated from the concern on fairness and justice between individuals and society. John Locke asserted in his book *The Second Treatise of Civil Government* originally published in 1690 that everyone is entitled to acquire personal property from the common and live off its produce without other's consent (Locke 1690). Thomas Paine said in his book *Agrarian Justice* in 1796 that "the earth, in its natural, uncultivated state was, and ever would have continued to be, the common property of the human race" (Paine 2000). The contemporary endeavor on theorizing BI is considered based on the work about social justice in the 1980s. For example, it is pointed out in the Rawlsian Difference principle that "all social primary goods, such as liberty and opportunity, income and wealth, and the bases of self-respect, are to be distributed equally unless an unequal distribution of any, or all of these goods is to the advantage of least favored" (Rawls 2009). Dworkin's notion of equality of (external) resources emphasized that the equality of resources is a matter of equality in whatever resources are owned privately by individuals (Dworkin 1981). More explicit versions of the definition of BI started to appear since the 1980s. Van Parijs (1991) first raised a detailed definition of BI in his paper arguing on the unfairness of John Rawls' point of view on surfers in Malibu, and since then many scholars have been trying to define BI from diverse perspectives and giving their own interpretation on what BI should be. The definition of BI remains contested.

Out of 152 pieces of literature reviewed in this chapter, there are in total of 33 pieces of literature in which BI is defined. Apart from the one raised by Basic Income

Earth Network (BIEN), the rest 32 pieces of literature are from academic journal paper and book chapters. Through an intensive reviewing the 33 pieces of literature, 10 key attributes in the BI definition are identified, which are shown in Table 2-1. The number of all the literature in which each of the attributes is mentioned is also elaborated in Table 2-1.

Table 2-1 Key attributes of BI definition extracted from the descriptions of BI definition

Key attributes of BI	Number of pieces of literature in which each attribute is identified
Universality	31
Unconditionality	27
Individuality	16
Institution	12
Sufficiency	12
Uniformity	9
Scale	6
Duration	7
Modality	4
Taxability	2

The most mentioned key attribute is “Universality”, which is raised in 31 pieces of literature. The second most mentioned key attribute is “Unconditionality” identified in 27 pieces of literature. “Individuality” and “Institution” are mentioned in 16 pieces and 12 pieces of literature respectively. The amount of the literature mentioning “Sufficiency” is the same as “Institution”. The rest of the key attributes, as shown in Table 1, are mentioned in less than 10 pieces of literature respectively. Different interpretations of each of the 10 key attributes of BI definition were further summarized from the literature (see Table 2-2).

Table 2-2 Summary of different interpretations on key attributes of BI definition

Key Attributes of BI definition	Interpretation	Reference
Universality	Not specified ¹	(Tondani 2009; Maskivker 2010; Zwolinski 2011; Standing 2012; Beck et al. 2015)
	All/ everyone in the society	(Nooteboom 1987; Baker 1992; Clark and Kavanagh 1996; Andersson and Kangas 2002; Cruz-Saco 2002; Pateman 2004; Van Parijs 2004; De Wispelaere and Stirton 2007; Pettit 2008; Raventós 2007; Lovett 2009; Koistinen and Perkiö 2014; Davies and Bregman 2017; Basic Income Earth Network No date; Van Parijs 1992b)
	Everyone citizen or resident	(Bill 1988; Van Parijs 1991; Krozer 2010; Widerquist et al. 2013; von Gliszczynski 2017; Chen and Quinonez 2017; Ruckert et al. 2017; Altman and Klein 2018)
	Every adult citizen or resident	(van der Veen 1998; McKay and Vanevery 2000; McKay 2001)
Unconditionality	Not specified	(McKay 2001; Cruz-Saco 2002; Pateman 2004; Tondani 2009; Standing 2012; Beck et al. 2015)
	No any conditions regarding work	(Clark and Kavanagh 1996; Van Parijs 2004; De Wispelaere and Stirton 2004, 2007; Pettit 2008; Lovett 2009; Nooteboom 1987; Van Parijs 1992b; Baker 1992; Ruckert et al. 2017; Maskivker 2010; Koistinen and Perkiö 2014; Basic Income Earth Network No date)
	Absolutely no any conditions (e.g. social demographic features)	(Bill 1988; Van Parijs 1991; van der Veen 1998; McKay and Vanevery 2000; Raventós 2007; Krozer 2010; Widerquist et al. 2013)
Unit	Individual basis	(Nooteboom 1987; Bill 1988; Van Parijs 1991; Clark and Kavanagh 1996; McKay 2001; Andersson and Kangas 2002; Cruz-Saco 2002; Van Parijs 2004; De Wispelaere and Stirton 2007; Krozer 2010; Standing 2012; Beck et al. 2015; Basic Income Earth Network No date; Van Parijs 1992b; Widerquist et al. 2013)
	Individual basis or household basis	(De Wispelaere and Stirton 2004)
Institution	Government	(Bill 1988; Achterberg 2002; Cruz-Saco 2002; Van Parijs 2004; Raventós 2007; Lovett 2009; Krozer 2010; Zwolinski 2011; Beck et al. 2015; Chen and Quinonez 2017; Pateman 2004; Davies and Bregman 2017)
Sufficiency	At the level enough to cover the basic needs	(Bill 1988; Baker 1992; McKay 2001; Pettit 2008; Altman and Klein 2018)
	No need to be sufficient to meet basic needs	(Van Parijs 1992b; Achterberg 2002; De Wispelaere and Stirton 2004; Widerquist et al. 2013; Clark and Kavanagh 1996) (Cruz-Saco 2002; Van Parijs 2004)
Uniformity	Should be the same level for every recipient	(Van Parijs 2004; Lovett 2009; Standing 2012; Widerquist et al. 2013; von Gliszczynski 2017)
	No need to be the same level for every recipient	(Nooteboom 1987; Baker 1992; De Wispelaere and Stirton 2004; Cruz-Saco 2002)
Scale	National level	(von Gliszczynski 2017; Davies and Bregman 2017)
	Not specified or not necessarily need to be the national level	(Van Parijs 2004; Krozer 2010; Widerquist et al. 2013; Altman and Klein 2018)
Duration	Periodical	(Achterberg 2002; Widerquist et al. 2013; De Wispelaere and Stirton 2004; Altman and Klein 2018; Lovett 2009; Van Parijs 2004)
	One-time	(Tondani 2009)
Modality	Cash	(Widerquist et al. 2013; Van Parijs 2004)
	Cash and in the combination of kinds in some situation	(Lovett 2009; De Wispelaere and Stirton 2004)
Taxability	Tax-free	(Nooteboom 1987; van der Veen 1998)

¹ Not specified means that interpretation on the attribute is not given in the literature.

Universality implies that everyone should be considered as BI recipient in contrast to selective policies singling out a subset of the population as beneficiaries (De Wispelaere and Stirton 2004). There is no disagreement that BI should be implemented universally in the reviewed literature. However, the universality could be divided into two types. The first type illustrates who are recipients of BI with a more abstract sense and the description includes, e.g. everyone (Baker 1992), all (Clark and Kavanagh 1996; Basic Income Earth Network No date; Van Parijs 2004), or all qualified persons (Davies and Bregman 2017). Altman and Klein (2018) claim that everyone should include children. The second type emphasizes the target population receiving BI with a relatively more concrete sense. In this type scholars usually assert that one with citizenship is qualified to be the recipient of BI (von Gliszczyński 2017; Chen and Quinonez 2017; Van Parijs 1991). In some cases, being an adult is another requirement in a stricter case (van der Veen 1998; McKay and Vanevery 2000; McKay 2001).

The second most mentioned key attribute is unconditionality. Unconditionality means that there are no conditions attached to exam whether one can be a BI recipient. Out of all the reviewed literature, 27 agrees that BI should be given unconditionally. The specific interpretation of what should be included in the conditions which are not attached to restrict recipients' eligibility to receive BI could be into two types. The first type of interpretation commonly states BI should be unconditional in the sense that there should be no conditions regarding work requirements (Baker 1992; Clark and Kavanagh 1996; Van Parijs 2004; Basic Income Earth Network, No date; Van Parijs 1992b). It could be understood comprehensively from a temporal dimension that whether a person would receive BI should not be determined by his/her past working history (Baker 1992; Pettit 2008), current working status (De Wispelaere and Stirton

2007) and willingness to work in the future (Basic Income Earth Network, No date; Raventós 2007). No means-test is another common interpretation of the unconditionality from the literature categorized into these groups (Maskivker 2010; Koistinen and Perkiö 2014; Van Parijs 1991; Clark and Kavanagh 1996). It also means that the current income level (McKay and Vanevery 2000) or having any other income source (Nooteboom 1987) would have no relevance to receive BI. It is also stated that BI recipients should not be required to participate in certain activities or services contributing to societies (Pettit 2008; Lovett 2009) or change their current behavior (Altman and Klein 2018) about, for example, the living arrangement (McKay and Vanevery 2000). The second type of interpretation defines unconditionality with a broader sense as absolutely no conditions should be attached to determine whether a person is able to receive BI (Van Parijs 1991; van der Veen 1998; McKay and Vanevery 2000; Raventós 2007; Pateman 2004). Compared with the former, unconditionality is interpreted in the second type to include not only work requirement but also other social-demographic features such as age, marital status, gender, health status, origins and social class (Bill 1988; Van Parijs 1991; van der Veen 1998; McKay and Vanevery 2000; Raventós 2007; Krozer 2010; Widerquist et al. 2013).

The third most mentioned key attribute is individuality, which identifies the individual as the unit of the target population that BI should be paid to. It is claimed in 15 pieces of literature that BI should be paid individually or based on an individual basis (Nooteboom 1987; Bill 1988; Van Parijs 1991; Clark and Kavanagh 1996; McKay 2001; Andersson and Kangas 2002; Cruz-Saco 2002; Van Parijs 2004; De Wispelaere and Stirton 2007; Krozer 2010; Standing 2012; Beck et al. 2015; Basic Income Earth Network, No date; Van Parijs 1992b; Widerquist et al. 2013). Van Parijs (1992b)

emphasized that paying BI individually implies that the target of BI should not be household. Widerquist et al. (2013) asserted that payment of BI for each member of the family should not be made aggregated as a whole and given to the family or to the household head of that family. Regarding this, it is pointed out that considering those traditional approaches in the welfare policies, it is noticeable that some of BI advocates also accept BI to be paid on a household basis (De Wispelaere and Stirton 2004).

The institution is the fourth most mentioned key attribute in the BI definition and it is relevant to who would be responsible for implementing BI. 12 pieces of literature commonly describe a government or a political establishment takes the role (Bill 1988; Achterberg 2002; Cruz-Saco 2002; Van Parijs 2004; Raventós 2007; Lovett 2009; Krozer 2010; Zwolinski 2011; Beck et al. 2015; Chen and Quinonez 2017; Pateman 2004; Davies and Bregman 2017). And the level of government is determined by the scale of BI. The scale specifically refers to a geographic location or administrative boundary where BI is implemented. von Gliszczynski (2017), and Davies and Bregman (2017) asserted that BI is a national-level policy. The scale of BI in other literature is interpreted in a general sense as a particular defined area (Altman and Klein 2018; Krozer 2010). Van Parijs (2004) further clarified that the scale of implementing BI at the provincial level or community level is also acceptable.

Compared with others, sufficiency is a relatively controversial attribute and it is relevant to a key concern about the amount of BI that should be given to each recipient and whether this should be set at a level enough to cover the basic needs of a recipient. Its interpretation varies among different scholars and mainly two types of interpretation are identified in the literature. The first type insists that BI should be set at a level enough to cover one's basic needs (Bill 1988; Baker 1992; McKay 2001; Pettit 2008).

Altman and Klein (2018) simplified basic needs as going through times of jobs and wage insecurity. Scholars from the literature categorized in the second type appear to support a more flexible attitude, arguing that the amount of BI is not necessarily fixed at a subsistence level considered in a given society and can be both exceed or fall short of that level (De Wispelaere and Stirton 2004; Achterberg 2002; Van Parijs 1992b; Van Parijs 2004). Some scholars even differentiate into so-called full BI and partial BI depending on whether the exact amount of BI is given at more or less than a socially agreed adequate level (Clark and Kavanagh 1996; Widerquist et al. 2013). Cruz-Saco (2002) reckon legitimate claims are required at the process of setting the level of BI as the conception of the good life or one's idea of occupation vary among people.

Uniformity was mentioned in 9 pieces of literature and it is about the issue of whether every recipient should receive an equal amount of BI. Some scholars argued that BI should be paid equally to recipients (Standing 2012; von Gliszczynski 2017; Lovett 2009). How much one would be paid is considered irrelevant to the type or the size of the household that this person belongs to (Van Parijs 2004; Widerquist et al. 2013). Others hold a different proposition, asserting that it is not with the necessity to set the amount of BI at the same level for every recipient (Nootboom 1987; Baker 1992; De Wispelaere and Stirton 2004; Cruz-Saco 2002). Nootboom (1987) considered that the amount of BI given to each recipient may be differentiated corresponding to the size of his/her household. It is also allowed that people receive a different amount of BI depending on the variation in age or their regions (Nootboom 1987; Cruz-Saco 2002; De Wispelaere and Stirton 2004).

For the rest of the attributes identified in the literature. The duration of BI refers to how often the payment of BI should be conducted. Apart from Tondani (2009), BI is

incontrovertibly considered a regularly-conducted payment rather than a one-time endowment (Achterberg 2002; De Wispelaere and Stirton 2004; Altman and Klein 2018; Lovett 2009; Van Parijs 2004), and the duration of BI is negotiable as every month, every week or even every day (Widerquist et al. 2013). Modality implies what form BI should be paid in. While some scholars claimed that BI should be paid in cash and not in kind (Widerquist et al. 2013; Van Parijs 2004), combining cash and in-kind form in the payment of BI is considered tolerated by other scholars (Lovett 2009; De Wispelaere and Stirton 2004). The interpretation of the taxability of BI clearly pointed out that the payment of BI is tax-free (Nootboom 1987; van der Veen 1998).

2.2. Conceptual impacts of BI on human society

Positive and negative conceptual impacts generated by BI as widely discussed in the field of BI can be divided into social, economic, and policy-and-governance aspects.

2.2.1. Positive conceptual social impacts of BI

The conceptual positive impacts of BI in the social aspect can be divided to improve the quality of life, enhance gender equality, and enhance the liberty for social justice.

i. Improve the quality of life

The first conceptual social positive impact that BI is argued to make is to improve the quality of life. Sircar and Friedman (2018) argue that BI might have a better impact on the health of beneficiaries compared with other conditional cash transfer programs, as BI can provide more financial security, reaching all people who might benefit, and providing a better boon to public health within one or two generations. The theoretical discussion regarding this topic is especially widely raised in South Africa, in which BI

is considered one of the necessary solutions to alleviate serious health issues, like HIV issues (Nattrass 2006; Richter et al. 2009). Ferguson (2010) claims that receiving BI would enable poor South Africans to spend more on nutrition and health care. BI is also considered to promote human development through education (Haagh 2015). The investment in human capital from BI would consequently stimulate the occurrence of positive changes in social attitudes and behavioral norms of the resident in the long run due to the spillover effect that BI can make to the community building (Forget et al. 2013).

ii. Enhance gender equality

The linkage between BI and addressing gender inequality was first raised by feminists since the British Women's Liberation Movement in the 1970s in the United Kingdom (Yamamori 2014). The traditional gendered division of labor (Elgarte 2008; Baker 2008) raised a gender issue that female engaged in full-time domestic work within a household usually lack autonomy and have low self-esteem, and they have to be materially dependent on their counterparts (Vollenweider 2013) since the domestic work is usually outside of the regular labor market and unpaid (McKay and Vanevery 2000).

Feminists in favor of BI argued that while many means-tested subsidies are implemented on a household basis, BI can improve the economic independence of females living with their partners because of its individuality (Raventós 2007; Cantillon and McLean 2016). As BI is distributed universally and individually, domestic work can be either treated as a paid job (Bill 1988; Baker 2008) or outsourced to care centers or contract cleaners (Bill 1988). Consequently, the power imbalance within the family

between care recipients and caregivers, who are usually female can be alleviated (Schulz 2017; Zelleke 2011), as financial resource and citizenship status is provided to females even though they do not have paid employment (Zelleke 2011).

It is also asserted that BI is also able to alleviate the economic difficulties of single-parent families headed by women (Raventós 2007; Schulz 2017; Evans 2009). In the context of the United States, “dual welfare states” results that this type of family with the same necessity to be assisted are often treated differently by the policies with similar purposes from “social insurance” and “public assistance” (Peterson and Petersen 1994). Therefore, this unfair issue for female-headed single-parent families would be addressed as BI is argued able to eliminate the “dual welfare states” (Clark and Kavanagh 1996).

Besides, BI would contribute to hinder the appearance of non-institutionalized outsourcing of domestic work, as they are usually discriminated in terms of benefits and protection (Vollenweider 2013).

iii. Enhance the liberty for social justice

The third social contribution that BI can make is to enhance liberty for social justice, and it is justified from the liberal and republican perspectives respectively by scholars.

Liberalism views liberty as a condition for social justice ideally enjoyed by everyone even out of society without interference from others (Pettit 1993, 2008a). Attaching conditions in welfare policies for the receipt of the benefit should be criticized by Noguera (2005), as it is contradicted to the principles of concern and respect according to liberal egalitarians’ point of view (Molander and Torsvik 2015). A well-known liberal justification on BI is from the argument of Van Parijs (1991) on the

unfairness of John Rawls' point of view on surfers in Malibu (Rawls 1988). While Rawls (1988) asserted that in a fair society, the leisure time cannot be enjoyed by those who are unwilling to work as the list of primary goods is originally stipulated to the least advantaged (Rawls 1988), Van Parijs (1991) argued that BI can eliminate the above ethical controversy, and is of necessity in a just and fair society in which everyone is with equal concern for all and does not discriminate against the conceptions of the good life of others. As an egalitarian and collective redistributive strategy (Mays 2016), BI is considered as a vital approach to secure a fair distribution of so-called real freedom based on the real-libertarian conception that everyone is able to choose their own way of a good life (Van Parijs 2004).

From the perspective of republicanism, liberty is viewed as a social status owned equally by all the citizens guided by law, and state control, which is generally expected to be loosened, is needed for a just and fair distribution in certain public fields such as education, medicine or social security (Pettit 1993, 2008a). Hence, BI is considered as a method to ensure social justice by minimizing domination (Pettit 2008; Lovett 2009) and it would greatly expand the personal and civic possibility of vulnerable people so that they will not swap their freedom for meeting basic needs (Raventós 2007; Lovett 2009). In the political debates in Europe and South Africa, BI is also raised to address social exclusion (Atkinson 2014; Barchiesi 2007) as those vulnerable minorities such as long-term unemployed and contingent employees, who are usually excluded from the existing social security, will also, be BI recipients.

2.2.2. Negative conceptual social impacts of BI

The negative conceptual social impacts of BI are argued to worsen gender

inequality and trigger the issue of unfairness.

i. Worsen gender inequality

Some feminists having skeptical attitudes towards BI pointed out the possibility that the traditional gendered division of labor is adversely reinforced rather than changed (Robeyns 2001; Gheaus 2008) if BI was implemented along. BI is argued unable to function as a panacea to all types of gender inequality (O'Reilly 2008). The females' desirability to participate in the labor market might be also possibly worsened by BI (Widerquist et al. 2013; Vollenweider 2013). And for other females participating in the labor market, they have to possibly bear spill-over effects from BI including, e.g. statistical discrimination, reinforcement of gender roles expectations, and gender hierarchies (Robeyns 2001).

In response to the arguments above, McKay (2001) defended that BI could provide a basis of gender-neutral social citizenship right by decoupling the income from work and ending mutual reinforcement of the institutions of marriage and employment (Pateman 2004). Consequently, the ways that citizens contribute to society are expanded and are not limited merely in productive work for economic growth (McKay and Vanevery 2000). Despite further assessment in the empirical cases on how BI would exactly influence the gender equality is required, combining BI with other supplemented measures including, for example, redefining the demands on caregivers or changing gender norms (Elgarte 2008) would be positive to enhance gender equality (Gheaus 2008; Robeyns 2001).

ii. Trigger unfairness

One objection raised by liberals is that BI seems paternalistic, especially compared

with other similar schemes such as basic capital or stakeholder grants (Wright 2004). Wright (2004) argues that rather than preventing individuals from squandering their resources, BI would ensure the stability of the social process by which power within class relations are shifted. Furthermore, Fitzpatrick (2011) proposed a weak version of paternalism which allows prioritizing autonomy while balancing it against the consideration of the good of others. BI enhances autonomy without risking “stakeblowing” and hence can reduce the risk of self-harm in order to promote more responsible use of autonomy (Fitzpatrick 2011).

The appearance of free riding in BI from republicanism is considered an objection against BI because of unfairness (Zwolinski 2017; Colin 1999). It is debatable why the wage of hardworking people has to be taken away to support those who live off their life to pursue their hobby, as the latter would take advantage of the leisure time, which is supposed to be a kind of social primary goods for the least advantageous group in a society (Rawls 2009). BI is argued incompatible with the idea of reciprocity (Ackerman et al. 2006), as those who finance BI (Fitzpatrick 2013) or who are in favor of employment-intensive lifestyle (Simon Birnbaum 2009) would be unfairly treated by BI. In short, this issue is also called “exploitation objection (White 1997, 2006) or parasitism (Williams 1999)”. Regarding this kind of criticism, Fitzpatrick (2005) argued that it’s not a sufficient objection to BI and it should be addressed by the social effects of an overall policy package within which BI has to be included. He further proposed that BI could be set at a proper level amount which is high enough for a basic standard of living while not limit people for engaging in participative schemes (Fitzpatrick 2005). Van Parijs and Vanderborght (2017) reversely criticized that if reciprocity is an important political norm, why the only form that a social contribution takes should be

paid labor in the market, considering the cases of those artists, parents, homemakers who are financially compensated either poorly or not at all.

2.2.3. Positive conceptual economic impacts of BI

The positive conceptual economic impacts that BI can potentially make is argued from three perspectives, which are to alleviate the risks of a flexible labor market, enhance the engagement of non-market activities, and promote the development of a local economy.

i. Alleviate the risks of the flexible labor market

The first positive conceptual economic impact of BI is to alleviate the risks of the flexible labor market. The trend of pursuing flexibility in the labor market and declining full employment can be witnessed at the global level (Ackerman et al. 2006) in order to adapt to the increasingly complex global economy. However, risks including income insecurity, unemployment, and underemployment also occur in a flexible labor market by loosening employment security, intensifying job insecurity, and structurally changing the stable wage system (Standing 2012).

It is argued that BI can contribute to promoting labor market flexibility while possibly offset these risks mentioned above (Bill 1988; Widerquist et al. 2013; Howard 2005; Standing 2013, 2004). This is because BI is able to enhance the bargaining power, as part of citizenship (Pateman 2004), and the collective strength of workers in the labor market by symmetrizing the power between labor and capital (Wright 2004; Clark and Kavanagh 1996). In doing so, the least advantaged in the society, such as poor, will be more able to accept labor market flexibility (Widerquist 2001) as they can select desired work (Van Parijs 2004, 1991; Standing 2013). They will also be capable of refusing

work with unsatisfied labor conditions more convincingly and effectively (Widerquist 2001), without worrying about losing the source of income (Raventós 2007).

Meanwhile, employers will also be urged to improve work, especially those part-time and insecure ones, to be more attractive by ensuring better working conditions and pay (Standing 2004). Accordingly, workers will be given more incentives to participate in this work (Bill 1988). In such a way, BI is argued to finally facilitate a more desirable form of labor market flexibility (Standing 2004).

ii. Enhance the engagement of non-market activities

The second positive conceptual economic impact of BI is to enhance the engagement of non-market activities (Vanderborght 2004; Birnbaum 2011; Opielka 2008; Wright 2004). Non-market activities refer to those noncommodified activities which are not linked to the market (Wright 2004). BI plays a key role against the commodification of labor power, which is a common way for people who do not own land or the means of production to permit their existence in the context of the capitalist economy (Raventós 2007). People will be engaged in these noncommodified productive activities not oriented toward the market and consequently, the sphere of economic practices outside of capitalism will be expanded (Wright 2004). Similarly, Jackson (2017) argues that an adequate BI will be able to extend the time available for pursuing non-market activities by breaking the tight nexus between the labor market and the well-being inherent in a capitalist economy. Those non-market activities are usually low-waged or even unpaid, including such as care work at home, culture, and recreation (Jackson 2017) or volunteer work (Zelleke 2011). In a society with BI, it is argued that ways of life become diverse, which include especially non-market-activities-centered

ones, and the possibility of one's to choose a way of life according to his/her individual will is enhanced (Birnbaum 2011).

iii. Promote the development of the local economy

Especially at the local level, BI is expected to play a role of development strategy (Lacey 2017) to promote the development of the local economy (Krozer 2010) through several approaches. The first approach is that the wealth generated from highly productive but labor-displacing sectors can be transferred, even at a global level, by BI to finance any rural development programs (Li 2011). With the health status and productivity of BI recipients improved, the structure of the demand side of the rural economy would be changed as BI recipients' spending on local goods and services would increase correspondingly (Standing 2004). BI has also been proposed in Australia as part of the discussion on the revision of policies supporting rural development and rural economic security (Altman and Klein 2018), which implies that this conceptual economic impact of BI is not only limited in developing countries but also able to be expanded to developed countries.

Second, BI contributes to boosting the growth of the local economy by facilitating the development of small business (Nelson 1999) which consequently lead to innovation (Nootboom 1987) in areas of implementation. Nootboom (1987) argued that products and services from small businesses are generally local-customized for the local market. He further stated that BI can promote the small businesses from four aspects, which are the compensation for diseconomies of small-scale production, stimulation of wage earners to become entrepreneurs, elimination of unequal treatment from the existing complicated but insufficient policies, and addressing of unfair

competition in the informal economy (Nooteboom 1987).

The third is the impact of BI on migration. Policies attracting immigration to rural areas are considered functioning as exogenous development strategies for the revitalization of the economy in the rural areas suffering on-going depopulation (Stockdale 2006). The areas where BI is implemented is considered possible to attract immigration (Krozer 2010). Entrepreneurial immigrants who are not born locally would even be able to establish a business without confined by rurality (Kalantaridis and Bika 2006). Meanwhile, a local-level BI is also anticipated to achieve a long-term alleviation of emigration pressure in the implemented areas because of its universality (Krozer 2010).

2.2.4. Negative conceptual economic impacts of BI

The negative conceptual economic impacts of BI argued in the literature are to impede full employment and trigger uncontrol immigration.

i. Impede full employment

While BI proponents tend to admit that full employment cannot be achieved in reality, other scholars in favor of full employment insisted the right to work (Harvey 2005) and contended that job guarantee programs will perform better than BI to address the income insecurity issue, without being threatened by inflation issue (Mitchell and Watts 2005; Tcherneva and Wray 2005).

Standing (2005) counterargued that previous right-to-work advocates neglect the inability to work and they often limited the definition of work into paid ones, while BI could bring positive impacts on promoting both paid and unpaid work. Moreover, a job guarantee would be faced with the denial of the right to work if people cannot acquire self-esteem or social identity from their work, while BI would not (Standing 2013). BI

is also asserted to be an essential condition complementary with other public policies together to protect the right to work, (Harvey 2005), as strong and equal security, and pathway for the development of flexible working life are both demanded to achieve such goal (Standing 2005).

ii. Trigger uncontrol immigration

One objection against BI is also relevant to migration but at the global level, and is that international immigration should be strictly regulated if BI is implemented in certain developed countries, (Zwolinski 2011; Andersson 2009) because the financial burden might result in the collapse of their welfare system (Boso and Vancea 2012). Regarding this, Zwolinski (2011) argued that such concern is improper from a libertarian perspective because it violates the freedom of movement and impedes the migration of those who would make a living even without BI. Boso and Vancea (2012) further argued that BI should not be viewed as a necessary cause for the potential increased migration as the neoclassic theory of migration implies the economic inequality among different countries have already been triggering the flow despite the implementation of BI.

2.2.5. Positive conceptual policy-and-governance impacts of BI

The positive conceptual policy-and-governance impacts of BI argued in the theoretical discussion can be divided into 1) poverty reduction policy, 2) direction for welfare reform, and 3) policy contributing to sustainability.

i. Poverty reduction policy

It is commonly argued that BI could potentially contribute to addressing poverty issues (Lacey 2017; Davies and Bregman 2017; Chen and Quinonez 2017; Ferguson

2010; Richter et al. 2009; Clark and Kavanagh 1996; Ilcan and Lacey 2015; Berman 2018), more effectively than existing poverty reduction policies (Davies and Bregman 2017). Such discussion is not only raised within the context of developed countries (Atkinson 2014; Clark and Kavanagh 1996) but also become popular in developing countries (Ferguson 2010; Seekings 2002; Ilcan and Lacey 2015; Van Parijs 2004). Banerjee et al. (2019) considered BI as an incremental antipoverty intervention and argued that it has the potential to contribute to boosting the income growth of poor people by strengthening their linkage to the market which is currently constrained due to the lack of credit and insurance or any psychological burden. Similarly, Widerquist and Lewis (2006) argued that while the efficiency of other policies such as, for example, the minimum wage or employment guarantee programs, are context-limited, BI would be inclusively effective in reducing poverty with different causes including the physical inability to work, single parenthood, inadequate demand for labor, inadequate human capital or a poor work ethic. The poor will not be subjected to scrutiny and damage on their self-esteem will consequently be alleviated (Wolff 1998), as they are provided with access to paid while meaningful work instead of merely being busy coercively (Van Parijs 2004).

Moreover, existing poverty reduction policies are often implemented on a household basis. Therefore, many poor, especially those who should have been able to be economically productive, are a disincentive to work or improve their human capital in the consideration of purposively making the whole families poor enough to be targeted by the policies. Regarding this, Ferguson (2010) argued that as everyone receives BI, it would alleviate the issue of such “dependency” in poverty reduction, and allow the poor to become more productive and attempt to be risk-takers such as

entrepreneurs. van der Veen (1998) reckoned BI could reduce poverty by ensuring the continuation of the poor in paid work simultaneously. Garfinkel et al. (2006) stated that the result from microsimulation indicates that BI would perform better to reduce the poverty rate and decrease the poverty gap than the existing welfare system in the United States. BI at an adequate level would bring everyone up to the poverty level (Clark and Kavanagh 1996), and unlike stakeholder grants, it would not trigger a one-time blow of all the stakes either through bad luck or waste (Wright 2004).

ii. A potential direction for welfare reform

Implementing BI is widely discussed as one of the potential directions for the future reform of the current dysfunctional welfare system (Sessa and Ricci 2014). And there were mainly two key interests based on which the discussion on such a topic is expanded.

The first key interest is its potential to address the poverty trap (Ackerman et al. 2006; Howard 2005). In many welfare states, means-test welfare policies usually trigger a phenomenon of the poverty trap that beneficiaries usually become reluctant to work as they will be forced to possibly give up their benefit if they found jobs (White 1997; Standing 2008). High marginal tax occurs if one can find a job and stop receiving means-tested benefits, and avoiding a net loss of income is considered the main reason causing the disincentives of beneficiaries to find work, move to high-paid work or extend the working time for the same rate of pay (Clark and Kavanagh 1996; Davies and Bregman 2017). The universality (Clark and Kavanagh 1996) and unconditionality (Zelleke 2011) of BI allow people to work without losing benefit at a punitively high effective rate of taxation (Zelleke 2011). Furthermore, the benefit of BI can be

maintained even one finds a job (Kangas et al. 2017). Nowadays, the concern about the impact of BI on addressing the poverty trap has expanded to the political debates in the context of developing countries such as South Africa (Makino 2004).

The second key interest is about its potential to address the increasing financial burden of the current welfare system. As BI is with no means test, it could lead to a more simplified bureaucracy (Kangas et al. 2017; Pateman 2004), and a loosen regulation (Davies and Bregman 2017). Consequently, the government administrative cost could be likely less than existing social welfare systems, since the administration work is assumed to be accomplished via a computerized and efficient tax-collection and transfer-payment technology (De Wispelaere and Stirton 2011). Such advantages might not always exist in another similar method, such as basic capital (Cunliffe and Erreygers 2003).

iii. Policy contributing to sustainability

BI is also increasingly raised as a policy contributing to sustainability focusing on two topics. The first topic is about the impact of BI on achieving environmental sustainability. Van Parijs (1992) asserted that the increase of well-being is not always synchronized with economic growth because the environmental component in the inter-generational welfare is often neglected. From an ecological perspective, the damage to the environment could be alleviated by BI, as the well-being of the neediest is concerned together with a moral justified economic expansion (Clark and Kavanagh 1996) which is no longer boosted prominently to achieve full employment for security (Andersson 2009). In line with this opinion, Achterberg (2002) suggested that the introduction of BI should be included in the planning of environmental sustainability, as

it contributes to a “green” welfare state where the production and consumption patterns became more sustainable while social security is still provided to enough people at a sufficient level. Groscurth (1998) contended that tolerating a small number of lazy-bones living on BI financed by the interest of their share of the natural capital is more important for a healthy society, compared with supporting a large number of dissatisfied unemployed through duties on wages. Moreover, A BI implemented at the global level is considered as the outcome for the argumentation of BI at the highest level, and is advocated corresponding to the vision on achieving global ecological sustainability allowing equal rights for all to produce ecological footprints (Andersson 2009). The justification for such global-level BI is based on the ethic of common ownership on social wealth such as natural resources or economic and technological inheritance (Fitzpatrick 2013), which is anticipated to lead to the neutralization of the ecological impact from current international migration to developed countries (Andersson 2009).

The second topic is about the linkage between BI and sustainable degrowth. As a proposal to redesign the money in a degrowth context, BI is considered a local currency distributed to all of the residents in a certain area and merely for its local use (Hornborg 2017). Furthermore, in order to ensure inevitable degrowth socially sustainable, BI should be included in a broader policy package combining both environmental and redistributive policies for a smooth transition of degrowth communities (Schneider et al. 2010). Such a policy package for sustainable degrowth should interlink BI with the reduction of the working hours, environmental and consumption taxes, control on advertising, and other labor policies (Kallis 2011).

2.2.6. Negative conceptual policy-and-governance impacts of BI

The negative conceptual policy-and-governance impacts of BI include the potential financial burden and unintended environmental damage due to unchecked autonomy.

i. Potential financial burden

There is an objection doubting that BI might cost more than other means-tested welfare policies because of tax-raising (Jackson 2017). For example, Jackson (2017) argued it would increase tax rates for below-median income workers up to 70 percent or 80 percent if BI was set at as one-half of median income in Canada. In response to this, Van Parijs and Vanderborght (2017) pointed out that it would require costly and intrusive government machinery to distinguish who are unwilling to work, even though it is agreed who cannot work should not be required to do so under the principle of reciprocity.

Nevertheless, one solution to address this potential cost issue is proposed that BI should replace other transfer programs that provide a lower level of comparable benefits (Zwolinski 2017). The other solution is to compromise on the unconditionality of BI proposals (Zwolinski 2017; White 2006), as not all the conditions are considered defensible (Cristian 2017). Based on four responses on the exploitation objection, which are perfectionism, the balance of fairness, the balance of reciprocity, and inherited asset responses, White (2006) argued that BI should be made conditional on behavior. Similarly, Atkinson (1996) proposed an idea of participation income and suggested that BI should be paid conditional on participation in the social contribution including, e.g. education or training, caring, or any other approved forms of voluntary work (Atkinson 1996, 2014). The idea of participation income is still criticized by some scholars

supporting BI (De Wispelaere and Stirton 2007). Nevertheless, the calculation of the actual cost of BI should be more context-specified in order to provide convincing evidence to testify this objection.

ii. Unintended environmental damage due to unchecked autonomy

It is commonly doubted that the conflict between the transition to a post-productivist economy and personal autonomy may occur if the activities generating tax to finance BI themselves are not environmental-friendly (Birnbaum 2009; Calder 2009; Fitzpatrick 2013). In response to this concern, obligation attachment to BI recipient is proposed as one solution to address the conflict (Fitzpatrick 2013).

2.3. Description of BI empirical cases around the world

In total 15 BI empirical cases located around the world are reviewed in this chapter and these BI empirical cases include both pilot projects and policy-oriented programs. Furthermore, they can be divided into negative income tax (NIT) and ex-ante BI according to the way of implementation. Regarding their geographic location, as shown in Figure 2-1, these BI empirical cases are from the United States, Brazil, Canada, Finland, India, Iran, Namibia, Spain, and Uganda.

The timeline of all the 15 BI empirical cases is shown in Figure 2-2, the implementation of four NIT experiments in the United States illustrated the movement of practicing BI started. During the 1960s and 1970s, four NIT experiments were implemented in the United States and one NIT experiment was implemented in Canada. Four NIT experiments in the United States were implemented in New Jersey-Pennsylvania (US (1)), North Carolina-Iowa (US (2)), Seattle-Denver (US (3)) and Gary in Indiana (US (4)) respectively. One NIT experiment in Canada (CAN (1))

was implemented in Manitoba from 1974 to 1978.

The Alaska permanent fund dividend (APFD) (US (5)) is the only BI empirical case launched between the 1980s and 1990s, which was initiated by Alaska Permanent Fund from 1982 based on the benefits generated from the oil production (Tabatabai 2012).



Figure 2-1 Geographic location of the 15 BI empirical cases reviewed in this chapter¹

¹ For Figure 2-1 and the following figures and tables, the abbreviation of the name of each BI empirical case is explained as follows:

US (1): The New Jersey graduated work incentive experiment; US (2): The Rural income maintenance experiment; US (3): The Seattle and Denver income maintenance experiments; US (4): The Gary, Indiana income maintenance experiment; CAN (1): Manitoba BI experiment (MINCOME); US (5): Alaska permanent fund dividend (APFD); BRA (1): Bolsa Familia program; NAM (1): Namibia BI pilot project; BRA (2): The BI program in Quatinga Velho; IRN (1): Iran BI program; IND (1): India BI pilot project; FIN (1): Finland BI experiment; CAN (2): Ontario BI pilot project; UGA (1): Eight's BI pilot project; ESP (1): Barcelona's B-MICOME. The background picture used in Figure 2-1 is from Esri (2018). World_Basemap_v2 (2018 December 20th) Retrieved from <https://www.arcgis.com/home/item.html?id=2158f80840c04e76bf0bcb765513416a>

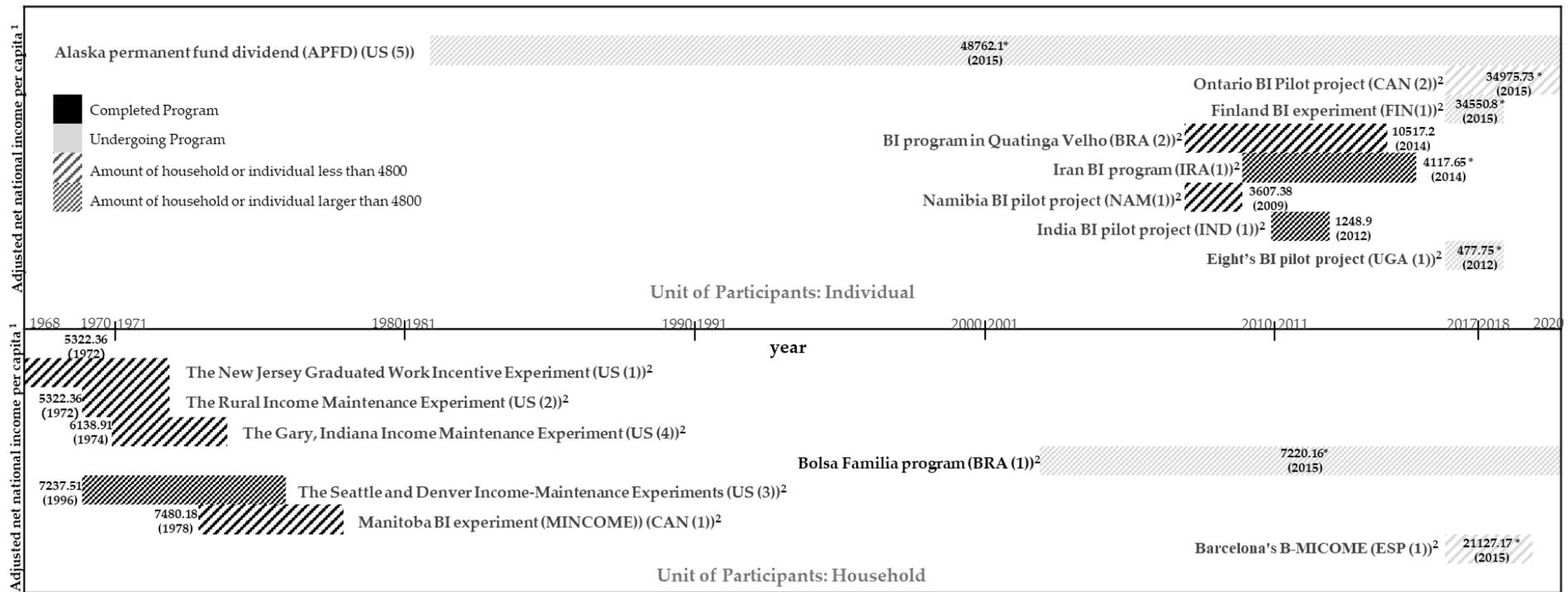


Figure 2-2 Timeline of the 15 BI empirical cases ranked by the net national income per capita in the ending year of the BI empirical cases^{1 2}

¹ 1. For each BI empirical case, the data of adjusted national income per capita in the final year of its implementation, or in the latest year if this empirical BI case is still ongoing is retrieved from World Bank Database. The data marked with * is the one selected from latest year due to the lack of data. The access date is January 16th, 2018.

² 2 The abbreviation and the location of each BI empirical case is referred to in Table 3.

After the 2000s, several BI empirical cases launched in developing countries. Bolsa Familia program (BRA (1)) is initiated in 2003 by the Ministry of Social Development in the Brazilian Government. A Namibia BI pilot project NAM (1) started in 2008 and ended in 2009 in the Otivero village, Omitara town. It was implemented by Namibian Basic Income Grant (BIG) Coalition which includes diverse sectors in Namibia Government and NGOs. In the meantime, another small BI pilot project (BRA (2)) was implemented in Brazil by an NGO called ReCivitas in Quatinga Velho village in 2008. A national-wide BI program (IRN (1)) is implemented in Iran in 2010. From 2011 to 2012, a BI pilot project (IND (1)) was implemented in Madhya Pradesh, India by the Self-Employed Women's Association (SEWA) due to the promotion of the United Nations Children's Fund (UNICEF). There are four BI empirical cases launched in 2017, which are Finland BI experiment (FIN (1)), Ontario BI pilot project (CAN (2)) in Canada, Eight's BI pilot project (UGA (1)) in Uganda, Barcelona's B-MINCOME (ESP (1)) in Spain. In general, the period in which all these 15 BI empirical cases last for varies from two years to eighteen years.

All the 15 BI empirical cases are further categorized by developing/ developed countries and democratic/ non-democratic governance in Figure 2-3. There are in total 9 BI empirical cases in the developed countries, while 6 cases in the developing countries. Apart from IRA (1), the rest of the 14 BI empirical cases are implemented in the countries with a democratic governance system. It is demonstrated in Figure 2-3 that BI empirical cases have been implemented in diverse ways. BI is implemented more at the household basis in the context of a developed country while more at the individual basis in the context of a developing country. Governments take the responsibility to implement BI empirical cases in the context of a developed country, while

non-government institutes were found to take such a role in some cases in developing countries.

Regarding the implementation scale, most of the BI empirical cases are implemented at the regional level, except for BRA (1), IRA (1), and FIN (1) (See Table 2-3).

Two types of the unit of receivers are found in all 15 BI empirical cases which are individual and household. The unit of the receivers was individual in seven cases, while in the other cases, especially those early NIT experiments in the United States and Canada, a household is designed as the unit of receivers.

The number of receivers also varies largely among the BI empirical cases. For example, BRA (1) and IRN (1), which are implemented at the national level in the context of developing have reached about 14 million households and 72.5 million people respectively (See Table 2-3). 6000 people in nine villages receive BI in IND (1). All the Alaska residents are the recipients of APFD in US (5). Nevertheless, the rest of the 11 BI empirical cases, either on an individual basis or household basis, are not more than 4800 units.

Table 2-3 Summary of the 15 BI empirical cases around the world

Starting time	Ending time	Location ¹	Name of the empirical BI cases ²	Type ³	Scale ⁴	Unit of receiver ⁵	Number of receivers	Condition(s) to select receivers ⁶	Amount of BI per unit of receivers ⁷ (Annually in total) (current US \$)	Payment scheme ⁸	Difference about the amount of BI per capita ⁹	National GNI per capita around the implementing time (current US \$) ¹⁰	Reference
1968	1972	New Jersey, the United States	The New Jersey graduated work incentive experiment (US (1))	NIT	R	H	1216 households	(a) (b) (c) (d) (f)	1364 - 3410 (1968) → 1683 - 4206 (1972)	N	N	4740 (1968)-> 6290 (1972)	(Chen and Quinonez 2017; Forget 2011; Widerquist 2005)
1970	1972	North Carolina-Iowa, the United States	The Rural income maintenance experiment (US (2))	NIT	R	H	809 households	(a) (f)	1318 - 2635 (1970) → 1351 - 2702 (1972)	N	N	5360 (1970)-> 6290 (1972)	(Chen and Quinonez 2017; Widerquist 2005)
1970	1976	Seattle-Denver, the United States	The Seattle and Denver income maintenance experiments (US (3))	NIT	R	H	4800 households	(a) (c) (f)	2335 - 4607 (1970) → 3351 - 6613 (1976)	N	N	5360(1970)-> 8980 (1976)	(Chen and Quinonez 2017; Widerquist 2005)
1971	1974	Gary, Indiana, the United States	The Gary, Indiana income maintenance experiment (US (4))	NIT	R	H	1799 households	(b) (c) (d) (f)	2345 - 3127 (1971) → 2809 - 3745(1974)	N	N	5700(1971)-> 8000(1974)	(Chen and Quinonez 2017; Widerquist 2005)
1974	1978	Manitoba, Canada	Manitoba BI experiment (MINCOME) (CAN (1))	NIT	R	H	1367 households	(f)	3051 - 4424	N	N	7190 (1974)-> 9700 (1978)	(Simpson et al. 2017; Chen and Quinonez 2017)
1982	To date	Alaska, the United States	Alaska permanent fund dividend (APFD) (US (5))	PBI	R	I	All residents in Alaska	(e)	1100 (2017)	N	N	56810 (2016)	(Goldsmith 2002, 2001; Casassas and De Wispelaere 2012; Permanent Fund Dividend Division, Alaska Department of Revenue Not date)
2003	To date	Brazil	Bolsa Familia program (BRA (1))	BI	N	H	14086199 households	(e) (g)	Maximum up to 754	N	Y	2940(2003)-> 8840 (2016)	(Suplicy 2008; Suplicy 2014; Perkiö 2015; Soares 2011)
2008	2009	Omitara, Namibia	Namibia BI pilot project (NAM (1))	BI	R	I	930 people	(d) (e)	97	N	Y	4220 (2008)-> 4150 (2009)	(Haarmann 2009; Jauch 2015)

¹ Location means the implemented areas of each BI empirical case

² The abbreviation of the name of each BI empirical case is elaborated in the bracket after their full names.

³ Type includes negative income tax (NIT), ex-ante basic income (BI), and ex ante partial basic income (PBI).

⁴ Scale includes regional level (R) and national level (N).

⁵ Unit of receivers includes household (H) or individuals (I).

⁶ There are seven conditions to select the receivers include family structure (a), gender (b), race (c), age (d), residence (e), restriction on the current income level (f), number of children (g) and others (h); NA means not applicable.

⁷ The amount of BI per unit of the receiver in the first four NIT experiments (US (1) to (4)) was estimated based on the data of US poverty threshold from the United States Bureau Census, available from: <https://www.census.gov/data/tables/time-series/demo/income-poverty/historical-poverty-thresholds.html>. The access date is January 14th, 2018. The number in the brackets means the year in which the amount of BI is distributed to each unit of the receiver.

⁸ Payment scheme includes direct delivery to each person (Y), and indirect to each person (N) including collected by household head or other household member.

⁹ The difference about the amount of BI per unit of the receiver includes having difference (Y) and having no difference (N). NA means not applicable.

¹⁰ GNI in the latest year was selected instead, if the data on the finishing year of an empirical BI cases is lacking. All of the data is retrieved from the World Bank Database. The access date is January 14th, 2018.

Table 2-3 Summary of the 15 BI empirical cases around the world (*Continuous*)

Starting time	Ending time	Location	Name of the empirical BI cases	Type	Scale	Unit of receiver	Number of receivers	Condition(s) to select receivers	Amount of BI per unit of receivers (Annually in total) (current US \$)	Payment scheme	Difference about the amount of BI per capita	National GNI per capita around the implementing time (current US \$)	Reference
2008	2014	Quatinga Velho, Brazil	BI program in Quatinga Velho (BRA (2))	BI	R	I	100 people	NA	112	NA	Y	7400 (2008)-> 12020 (2014)	(ReCivitas 2012; McFarland 2016a; Perkiö 2015)
2010	2015	Iran	Iran BI program (IRN (1))	BI	N	I	72500000 people	NA	480 - 540	N	N	6140 (2010)-> 5340 (2015)	(Tabatabai 2012)
2011	2012	India	India BI pilot project (IND (1))	BI	R	I	6000 people	(e)	Adult: 38 (2011), 57 (2012) Children: 19(2011), 28 (2012)	N	N	1380 (2011)-> 1480 (2012)	(Perkiö 2015; Davala et al. 2015; Beck et al. 2015)
2017	2018	Finland	Finland BI experiment (FIN (1))	PBI	N	I	2000 people	(d) (h)	8200	Y	Y	45050 (2016)	(Perkiö 2012; Kangas et al., 2017; Kela 2016, 2018; Kangas et al., 2019)
2017	2020	Ontario, Canada	Ontario BI pilot project (CAN (2))	BI	R	I	4000 people	(d) (e) (f)	Multiple plans: e.g. 13640 for single person	Y	N	43660 (2016)	(Ontario 2017)
2017	2018	Fort Portal, UGA	Eight's BI pilot project (UGA (1))	BI	R	I	144 people	NA	Adult: 219 Children: 110	NA	N	630 (2016)	(McFarland 2016b; Home page of eight. world No date)
2017	2019	Barcelona, Spain	Barcelona's B-MICOME (ESP (1))	BI	R	H	2000 households	(d) (e) (h)	1390 - 23289	N	N	27600 (2016)	(Colini 2018)

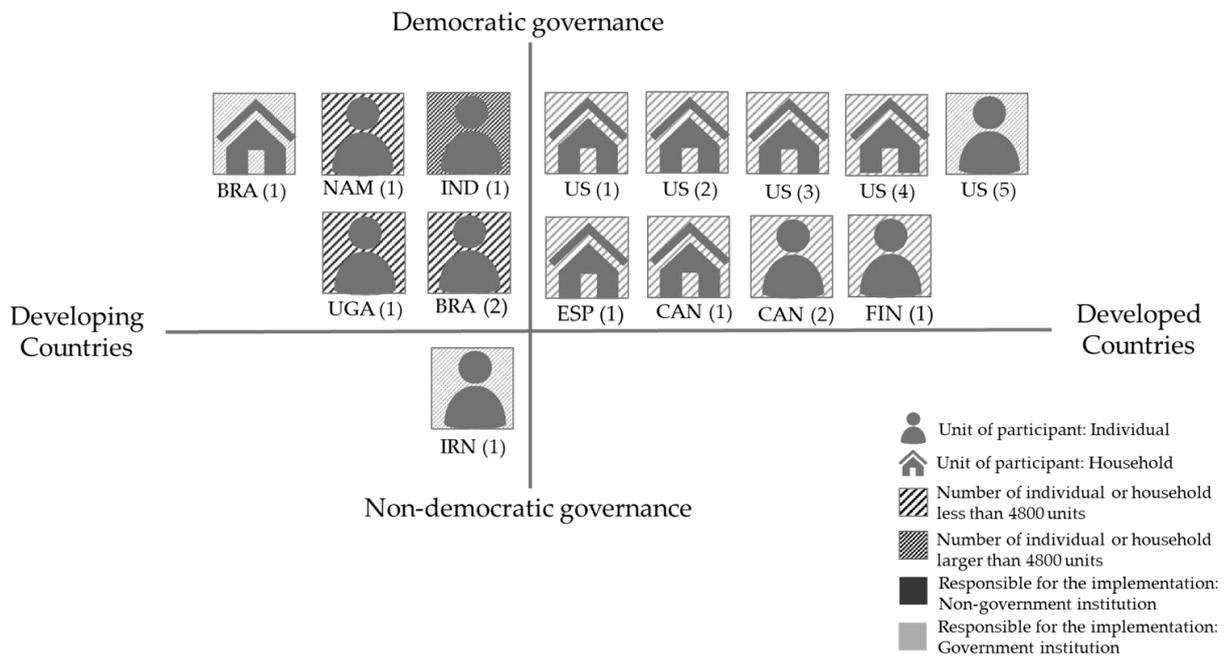


Figure 2-3 Categorization of the 15 BI empirical cases reviewed in this chapter by the differences in their implementation¹

Certain conditions required for selecting the receivers were found in most of the existing BI empirical cases, apart from the ones in which the information is lacking. As shown in Table 2-3, restriction on the current income level is a common requirement in four NIT experiments (US (1), US (2), US (3), and US (4)) in the United States and CAN (1) in Canada. Besides, gender, race, age, and residence are also required respectively in these BI empirical cases mentioned above. The residence is also emphasized in some of the BI empirical cases implemented at the regional level, such as US (5), NAM (1), IND (1), and CAN (2). Age is another condition commonly required for the selection of receivers, which can be seen in NAM (1), FIN (1), CAN (2) and ESP (1). In BRA (1), families with a monthly income less than R\$ 140 (US \$ 42, current price) per capita and dependent children under 15 years old and 11 months of age, as

¹ There is no meaning for the order of BI empirical cases within each quadrant. All the abbreviations refer to Figure 2-1 or Table 2-3.

well as adolescents from 16 to 18 years old are qualified to participate in this program (Suplicy 2014). Meanwhile, the report of children's vaccination as well as school attendance to the government are required for receiving BI (Suplicy 2014).

The amount of BI distributed is also different largely between the BI empirical cases. The BI empirical cases implemented in developed countries usually provide a higher amount than those in developing countries. During the 1960s to 1970s, US (1), US (2), US (3) and US (4) offered US \$ 1,364 to 3,745 to each participated household annually. The amount of BI which each household can receive yearly in CAN (1) in the 1970s reached between US \$ 3050.98 to 4,424. Furthermore, in CAN (2) in 2017, every single receiver is supposed to receive up to Canadian \$ 16,989 (about US \$ 13640.07, current price) annually (Ontario 2017). Similarly, FIN (1) offers € 6720 (about US \$ 8200, current price) to each receiver. In contrast, every receiver in NAM (1) only receive N\$ 1200 (about US \$ 96.72, current price) annually. Similarly, the annual amount of BI is merely about US \$ 57 for an adult receiver in IND (1) and US \$ 112 in BRA (2) respectively. The situation is relatively better in the developing-country cases implemented at the national level. Each household can receive about US \$ 480 annually in BRA (1). IRN (1) can provide about US \$ 480 to 540 to every receiver. As shown in Table 2-3, the amount of BI that each receiver can get annually in the 15 BI empirical cases is commonly largely less than the contemporary Growth National Income (GNI) per capita of the countries where these cases are implemented, which implies the sufficiency of BI in these cases is doubtful.

Regarding the BI payment scheme, in all the BI empirical cases in which the unit of receivers is household, the money is distributed to the household head. Women are preferred to be the ones within the family to be responsible for taking care of the

payment in the Bolsa Familia Program BRA (1) (Suplicy 2014). Moreover, in US (5), NAM (1), IRN (1) and IND (1), BI is practically collected by the household head, though it is claimed that money is paid to each member of the family.

Even in a BI empirical case, not all the receivers get the same amount of money and this phenomenon can be further divided into three types. The first type happens in the NIT experiments as they usually have several different plans designed for counting the payment. The actual amount of money which each receiver can have is the guarantee levels minus a marginal tax of a private income if that receiver had. For example, in US (1), US (2) and US (4), the amount of money distributed to each receiver depends on the combination of different guarantee levels relative to the poverty line, which ranges from 0.5 to 1.48, and marginal tax rates, which range from 0.3 to 0.7. Two nonlinear income functions, with marginal tax rates of 0.7 minus 0.025 times private income and 0.8 minus 0.025 times private income, were tested in US (3). In CAN (1), there are totally nine different plans of the amount of money, which are combined with three guarantee levels (from C\$3800 to C\$ 5400) and three tax rates (35 percent, 50 percent, and 75 percent). The Second type happens in the BI empirical cases in which adult and children receivers are differentiated. In IND (1), an adult can receive about US \$ 57 per year, while a child can merely receive half of this amount. Similarly, in UGA (1), adult receivers are supposed to receive US \$ 219 annually while children receive US \$ 110 annually. The third type exists in the BI empirical cases where the scheme of calculating the amount of money is designed based on the number of family members. In CAN (2), the amount of money which a single person can receive annually is up to about C\$ 16,989 (about US \$ 13,640, current price). Meanwhile, a couple can receive up to C\$ 24,027 (about US \$ 19,292, current price). It is more complicated in BRA (1) that

the final amount of money is summed up depending on the income level per capita, the total number of children and the age of each child (Soares 2011; Suplicy 2014), which causes the final amount of money largely ranges from R\$ 384 (about US \$ 100, current price) up to R\$ 2,904 (about US \$ 754, current price) annually (Soares 2011).

Apart from the above details of implementation, the purposes of BI empirical cases are different between developing countries and developed countries. Those empirical cases in the developing countries are understood as important trails to eradicate extreme poverty issue (Banerjee et al. 2019) through unconditional cash transfer. The stimulation of BI on the economy of local communities was also pointed out in the literature (Davala et al. 2015; ReCivitas 2012). At the meantime, following the concerns on income inequality (Chen and Quinonez, 2018), BI empirical cases in the developed countries were launched primarily for testifying the social and economic effect of BI as an approach toward welfare reform (Widerquist 2005; Kangas et al. 2019; Simpson et al. 2017).

2.4. Outcomes of the BI empirical cases

Despite the amount of the literature discussing the outcome of BI empirical cases is relatively fewer than the ones about BI theories, the outcomes of some of the BI empirical cases including US (1), US (2), US (3), US (4), Can (1), US (5), IND (1), BRA (1), and BRA (2) were investigated in the literature.

2.4.1. The response of labor supply change

The response of labor supply change on BI was reported in some literature of which the purpose was to evaluate the outcomes in US (1), US (2), US (3), US (4), and Can (1). In US (1), Hausman and Wise (1976) identified that the working hour of white male

household head increases by 14 percent corresponding to the increase of 100 percent of wage, while decreases by 2 percent corresponding to an increase of 100 percent of non-wage income. Through the estimation based on the data from adult married male receivers in US (4), Burtless and Hausman (1978) found that the high guarantee level and high marginal tax rate set in this experiment would not cause a substantial reduction of labor supply, while modest the level of living standards and minimize the expenditure. The response of the labor supply on NIT experiments are demographically different, and US (1), US (2), US (3) and US (4) found that on an average reduction of labor supply of husbands, wives and single female heads, as well as youth are about the equivalent of 2 weeks, 3 weeks and 4 weeks respectively (Robins 1985). Meanwhile, young and single-headed households drove the reduction of labor market participation in CAN (1) (Calnitsky and Latner 2017). By using hitherto unanalyzed data in CAN (1), Calnitsky and Latner (2017) observed 11.3 percent of the reduction in the labor market participation, and about 3.1 percent of the reduction can be attributed to “social interaction” or “community context” effects. Different from the usual assumption, data from a qualitative survey shows that the reasons causing the reduction of labor supply in CAN (1) are the engagement in care work, disability, illness, uneven employment opportunities, and educational investment (Calnitsky and Latner 2017). Widerquist (2005) concludes that the reduction of labor supply in these NIT experiments mentioned above are usually misinterpreted to be “large”, as the reduction of work hours identified in some of the experiments fall into the range between 0 to 7 percent, where the fall depends on the elasticity of demand for labor.

2.4.2. Quality of life

Another important result which is commonly identified in the reviewed BI empirical cases is the improvement of quality of life including health and education.

i. Health

Through the comparison of the data both from experimental and control groups in US (1), US (2), US (3), and US (4), Salkind and Haskins (1982) concluded that the implementation of NIT experiments improve the quality of nutritional intake of children and reduce the appearance of children with low birth weight, due to the increase of resources available in the family. By reviewing literature relevant to the NIT experiments in the United States and Canada during the 1960s and 1970s, Forget (2011) found that an 8.5 percent reduction in the hospitalization rate for receivers relative to controls, particularly for accidents and injuries and mental health. Meanwhile, he also identified a decline of receiver contacts with physicians, especially for mental health. Such a positive impact of BI on human health, including child health development, mental health in the NIT experiments in the 1960s and 1970s have been reviewed again in recent researches (Ruckert et al. 2017; Chen and Quinonez 2017).

It is identified that US (5) has a positive impact on new born's health outcomes as an additional US \$ 1,000/ person/ year increases birth weight by 17.7 grams and substantially decreases the likelihood of a low birth weight (Chung et al. 2016) which is especially significant for less-educated mothers (Ruckert et al. 2017). Likewise, another research reported an increased birth weight of 38.8 grams for receivers (Ruckert et al. 2017). Evans and Moore (2011) identified a similar phenomenon that mortality rises immediately after income receipt in APFD.

In IND (1), Beck et al. (2015) evaluated the health outcome by analyzing the data with multiple imputations, propensity score matching and weighted logistic regression, and they found that the odds of minor illness and injuries, needing treatment but not hospitalization, was 46 percent less in the experimental group than the control group. However, no significant effect of BI on more serious illness and injuries, child vaccination coverage was observed (Beck et al. 2015).

A reduction of child malnutrition through the WHO measurement technique is elaborated in the Namibia BI pilot project (NAM (1)), as the rate of underweight children declines from 42 percent in November 2007 to 10 percent in November 2008 (Haarmann 2009). Meanwhile, together with the enhancement of government, NAM (1) allows HIV-positive residents to have more access to nutrition and medication. It is reported that residents used the settlement's health clinic much more regularly (Jauch 2015). The revenue of a local clinic was reported to increase from N\$ 250 per month in early 2007 to nearly N\$ 1300 per month in 2008, and a possible reason is considered more local residents became able to pay N\$ 4 for each visit in the clinic after the implementation of the BI pilot project (Haarmann 2009).

In BRA (2), it is also reported that on an average 25 percent of the BI distributed to each of the receivers was used for food, which led to a gain in the nutrition of these people (Pasma 2014).

ii. Education

The NIT could positively influence the education of children from the families involved in US (1), US (2), US (3), and US (4) as an experimental group. Salkind and Haskins (1982) identified that the school attendance levels among children in the

experimental group are higher than those in the control group in US (2), US (3), and US (4). A similar result is also identified by Forget (2011) that the grade-11 students in Dauphin Town from the families in the experiment group are more likely to continue to grade 12 than those from the families in the control groups during CAN (1).

A positive effect on school performance without labor force participation was also identified in BRA (1) (Simoès and Sabates 2014; Soares et al. 2010). Glewwe and Kassouf (2012) used school census data to compare changes in the enrollment, dropping out and grade promotion across schools that adopted the Bolsa Familia program at different time. They found the rate of school enrollment was increased by 5.5 percent in grade 1-4 and 6.5 percent in grade 5-8; the school dropout rate was reduced by 0.5 percent in grade 1-4 and 0.4 percent in grades 5-8; the grade promotion rates were raised by 0.9 percent in grades 1-4 and 0.3 percent in grades 5-8. By using longitudinal household data and propensity score weighting method to assess the impact of BRA (1) on schooling outcomes of children aged 6 to 17 years, the school participation and grade progression of girls were found increased by 8 percent and 10 percent respectively (de Brauw et al. 2015). Such an effect is especially significant on girls in rural areas aged 6-17 years and in urban areas aged 15-17 years.

In IND (1), it was found that on an average 43 percent of total expenditure in families receiving BI was for children's schooling, which was higher than control groups (Davalá et al. 2015). Furthermore, parents reports and government records elaborated a positive impact of BI on the school enrollment, as the school enrollment rate was 76 percent in the villages receiving BI while merely 51.3 percent in the control villages (Davalá et al. 2015).

The impact of BI on education is also significant in NAM (1). Parents became able

to pay school fees and school uniforms for children (Jauch 2015). Drop-out rates at the school fell from almost 40 percent in November 2007 to 5 percent in June 2008 and further to almost 0 percent in November 2008 (Jauch 2015; Haarmann 2009).

2.4.3. Local economy

US (5) is considered to bring macroeconomic and social impact on Alaska (Goldsmith 2002, 2001). The difference in the size of the payment over time and in the amount received by families of different sizes showed no evidence proving that Alaskan households react differently in changing their consumption patterns after receiving payment from US (5). Also, there is no evidence illustrating any changes between Alaska and the other 49 states in the United State regarding the seasonal consumption pattern. However, the consumption of the very same household was found excessively sensitive to their income tax refunds, implying that the anticipated income variations will be taken into consideration by households in their consumption decisions when the income changes are large, regular, and easy to be predicted (Hsieh 2003). By using data sets from Alaska Long-Form Survey Public Use Micro Samples (PUMS) from 1990 and 2000, and an American Community Survey annual from 2005 through 2015 respectively, Berman evaluated the effect of US (5) to mitigate the poverty rate among the rural indigenous people in Alaska, who are the economically disadvantaged minority with historically stable poverty rates higher than 17 percent since 1990 (Berman 2018). His study found that taking APFD into consideration as BI would lead to a further decline of rural Alaska native poverty rate, which maintains stable between 6.1 percent to 12.4 percent from the years from 1990 until 2015 (Berman 2018).

In NAM (1), the introduction of BI can effectively assist with community

mobilization, as migration towards Otijvero occurred due to poor family members were attracted by BI. Furthermore, the rate of the local residents engaged in income-generating activities (above the age of 15 years) increased from 44 percent to 55 percent. It is reported that residents receiving BI also gained income by starting small businesses such as brick-making, baking of bread, and dress-making (Jauch 2015; Haarmann 2009). Consequently, the severe poverty and food poverty in Otivero village reduced from 86 percent to 68 percent and from 76 percent to 37 percent respectively within one year (Ilcan and Lacey 2015; Jauch 2015).

Although the quantitative data is lacked, the impact of BRA (2) on the economy of the village where BI was implemented was also reported, as it promoted the development of local small businesses including local restaurants. Moreover, the micro-credit system managed by the villagers participating in the project also emerged after one and two years of the implementation of the project (Baulant 2017).

2.4.4. Gender empowerment

The impact of BI on improving the economic independence of the female is also investigated in the BI empirical cases. In the context of IND (1), an increase of female farmers was observed in the villages receiving BI from 39.1 percent to 65.7 percent, and are able to use BI to buy seeds, fertilizer and other inputs (Davala et al. 2015). Similarly, the implementation of NAM (1) also contributed to the reduction of dependency of local women on men for their survival by releasing their pressure on engaging in transactional sex (Jauch 2015; Haarmann 2009).

2.5. Ambiguity between BI theories and BI empirical cases

By directing the intricate status of the linkage between BI theories and empirical

cases, three key findings are elaborated as follows. First, this chapter recognizes that the definitions of BI are remaining imprecision. The descriptions vary in the literature on the key attributes of the definitions including scale, institution, unit, unconditionality, universality, uniformity, and sufficiency. Similarly, the BI empirical cases reviewed in this chapter are also identified to be implemented in diverse ways. Besides, the purposes of launching BI empirical cases are different between developing and developed countries.

Second, gaps between the conceptual impacts of BI and the outcomes of BI empirical cases were identified through the literature review. As shown in Table 2-4, while BI is argued in the literature to bring various conceptual impacts to the human society from the social, economic, and policy-and-governance perspective, many of them have not yet been identified to be achieved in the BI empirical cases. Apart from the conceptual impact of BI on improving the quality of life including health and education, enhancing gender inequality, promoting the development of local economy and reducing poverty, the rest conceptual impacts, especially the negative ones, are not stated in the outcomes of the BI empirical cases reviewed in this chapter. The gap mentioned above implies the necessity of obtaining more solid evidence for the identification of the conceptual impacts of BI, including both positive and negative ones, by promoting the implementation of more BI empirical cases with assessments on their outcomes in the future.

It is also reasonable to suspect that many conceptual impacts of BI may be likely unable to be realized within the period when the BI empirical cases are implemented, as they are usually not sustained for the long term. Except for BRA (1) and US (5) which have been lasting until now, all the BI empirical cases initiated before 2017 have been

ended, and most of them lasted merely for from two to six years (See Table 2-2).

Furthermore, the BI empirical cases initiated in 2017 are originally designed for two to three years.

Budget constraint (Simpson et al. 2017) is argued to impede BI empirical cases to be sustained in the long term. In some cases, such as US (1), US (2), US (3) and US (4) (Moffitt 1992), an internal reason for causing the budget constraint is derived from the impatience of the stakeholder providing financial resource, usually the government, on the performance of BI empirical cases (Ilcan and Lacey 2015). Meanwhile, the rising inflation is mentioned as an external cause of ending empirical cases such as BRA (2) (Baulant 2017). Besides, we argue that current nebulous BI definitions also fail to provide precise and specific principles guiding to implementing BI empirical cases. Given all these reasons above, the 15 BI empirical cases reviewed in this chapter have diverse ways of implementation and they are different from what BI is argued to be.

This chapter concludes that the current status of the field of BI is complicated, as linkage and gaps both exist between BI theories and BI empirical cases, which implies that our society may have not been mature enough yet to accept the implementation of BI commonly worldwide. In other words, the policy environment for implementing BI has not been fully created for the time being both in developed and developing countries. The current status of BI also implies that the feasibility of implementing BI should be investigated in more countries with different governance system and social-economic status. Taking China and Japan as two case studies in this research is of importance to contribute to filling the knowledge gap mentioned above. Following the typology shown in Figure 2-3, China would an example representing developing countries with communist governance while Japan would be an example representing developed

countries with democratic governance where there are not any BI empirical cases launched yet.

To further address the gaps in the field of BI and to promote BI to be accepted and implemented globally in different contexts in the future, therefore it is needed to make the current BI definitions must be simplified, detailed, unified, and principles were required. In addition, neglecting controlling bureaucracy and being dismissive to the administrative challenges on the policy implementation is considered to mislead BI advocacy to become self-defeating (De Wispelaere and Stirton 2017). Thus, future studies should also focus more on the formation of the universal principles for implementing BI from the perspective of public administration, which is rarely discussed explicitly among BI advocates. This might require a certain amount of “flexibility” in BI definitions so that inevitable conditions attached to those empirical cases due to the compromising of the real situation are able to be better justified.

Table 2-4 Current status of identification of conceptual impacts of BI based on the outcomes from the 15 BI empirical cases reviewed in this chapter

Conceptual impacts of BI summarized in the theoretical discussion		The conceptual impact has been described in the outcomes of the 15 BI empirical cases	The conceptual impact has not been described in the outcomes of the 15 reviewed BI empirical cases	
Aspect	Content of conceptual impacts			
Social aspect	Improve the quality of life (+)	Improvement of health (+) ¹	✓	
		Improvement of education (+)	✓	
		Change the social value (+)		✓
	Enhance the liberty for social justice (+)			✓
	Enhance gender equality (+)	Enhance the economic independence of female (+)	✓	
		Alleviation of power imbalance in the family (+)		✓
		Alleviation of economic difficulty of single-parent families headed by women (+)		✓
	Worsen gender equality (-) ²			✓
	Trigger unfairness (-)	Paternalistic (-)		✓
		Freeriding (-)		✓
Economic aspect	Alleviation on risks of the flexible labor market by enhancing the bargaining power of labors (+)			✓
	Engagement of non-market activities (+)			✓
	Promote the development of the local economy	Finance development programs at the local level through a global wealth redistribution (+)		✓
		Facilitate the development of small business (+)	✓	
		Promotion on migration (+)	✓	
	Impede full employment (-)			✓
	Uncontrol immigration (-)			✓
Poverty reduction policy (+)		✓		
Policy-and-Governance	Potential direction for welfare reform (+)	Address poverty reduction trap (+)		✓
		Alleviate the financial burden of government (+)		✓
	Policy contributing to sustainability (+)	Contribute to environmental sustainability (+)		✓
		Contribute to sustainable degrowth (+)		✓
	Increase the burden of public finance (-)			✓
	Unintended environmental damage due to unchecked autonomy			✓

¹ (+) refers to a positive conceptual impact of BI summarized in this chapter

² (-) refers to a negative conceptual impact of BI summarized in this chapter

Chapter 3. COST ESTIMATION OF IMPLEMENTING BASIC INCOME (BI) IN THE RURAL CONTEXT AT THE MUNICIPAL LEVEL

3.1. Introduction

The question of whether BI is affordable remains commonly arguable in the public debates on the financial feasibility of implementing BI proposals. BI supporters advocate that BI would contribute to saving the administrative cost for the public finance as the bureaucracies for the existing complicated welfare state will be simplified (Kangas et al., 2017; Pateman 2004). In the meantime, it is also criticized that the cost of implementing BI would be huge and unaffordable to the government, as the population who are not unemployed, not retired, without young children, not disable, and so forth would be universally given BI (Bergman, 2004). Therefore, estimation on how much the implementation of BI would cost in a given context is of necessity to provide important evidence to the debate above.

The cost of implementing BI is not merely a sum-up of the total payment to all the BI recipients. As the implementation of BI is also accompanying with the adjustment on the existing policies and tax systems (Pereira, 2017), how much could be saved in the public finance due to the implementation of BI at the meantime should also be taken into consideration in its cost estimation.

Previous studies have roughly estimated the cost of the implementation of BI, usually as an alternative to the existing social security system, at the national level (See Table 3-1). For example, Clarks (2003) estimated that the total payment of a BI proposal designed based on the poverty threshold in the United States which covers all the citizens in all ages would be about 1.97 trillion USD in 1999. In the context of

Switzerland, a national-wide BI proposal giving every adult and minor resident 2,500 CHF and 625 CHF monthly is estimated to pay all BI recipients in total 209 billion CHF, while the saving from all the policies, including the ones from the social security system, potentially replaced by BI is merely 62.3 billion CHF (equivalent to 64.5 billion USD) (Jorimann, 2017). Bergmann (2004) argued that in the year of 2000, a BI payment given to each of the adults Americans between 20 to 65 years old at the level of the poverty line would cost in total about 1456.73 billion USD which accounts for about 15 percent of the GDP of the United States. Young and Mulvale (2009) estimated that the cost of implementing BI in Canada at the national level is about CAD 286 billion considering all the savings from the replacement on the existing social security systems by BI.

Table 3-1 Cost of BI in the previous studies

Author(s)	Context	Content of BI proposal	Cost for the country
Clarks (2006)	The United States	BI given to all with the amount decided based on the poverty threshold in 1999	1.97 trillion USD
Bergman (2004)	The United States	BI given to all adults between 20 to 65 years old with the amount at the level of the poverty line	1456.73 million USD
Young and Mulvale (2009)	Canada	BI given to all people aged in and above 18 years old with amount of 15000 CAD (equivalent to 11000 USD) per year, and to all people under 18 years old with amount of 4000 CAD (equivalent to 3000 USD) per year	286 billion CAD (equivalent to about 213 billion USD)
Jorimann (2017)	Switzerland	BI given monthly to all adult with 2,50 CHF (equivalent to 265 USD) and to all minor with 624 CHF (equivalent to 661 USD)	62.3 billion CHF (equivalent to about 65.9 billion USD)

The aim of this chapter is to estimate the cost of implementing BI in the rural context in China and Japan, taking the rural areas in Ganzhou (赣州) City (Shorted as

rural Ganzhou, the same below) and Sado (佐渡) city (Shorted as Sado, the same below) as two cases studies representing the rural contexts in the two countries respectively. The objective of this chapter is to calculate how much it would cost respectively if the BI was implemented in rural Ganzhou and Sado now. In doing so, different BI scenarios were designed which include the amount of payment for each BI recipient based on the social-economic status of the case study areas, and the corresponding replacement of policies and the adjustment on the taxation systems. Furthermore, the cost of implementing BI was estimated in each of the scenarios by calculating the total amount of BI payment to all recipients, saved expenditure of the policies replaced by BI, and the increased tax revenue from the adjustment on the tax system in the case study area. The results about the cost of the implementation of BI were discussed together with the financial capability of the local government to answer the question of whether the implementation of BI is affordable now and thus how to finance the implementation of BI in the rural context of China and Japan.

3.2. Define the implementation of BI in the rural context in China and Japan

3.2.1. Definition

In China, one criterion to define urban and rural areas based on the de facto built-up physical condition (Qin and Zhang, 2014). According to the National Bureau of Statistics of China (2005), while the urban areas mainly include the districts, city without districts, residential committees adjacent to the de facto built-up areas to city governments or county government, and the town where the county government is located, the rural areas roughly refer to the areas other than the ones mentioned above.

Corresponding to the classification on between urban and rural in a geographic

sense, rural population and urban population are defined based on their usual residence: the urban population refers to all people residing in urban areas including cities and towns, while rural population refers to those other than urban population (Chinese National Bureau of Statistics, 2017). However, the existence of the household registration system (Hukou) also leads to a phenomenon that the urban population defined above also includes immigrants who are still registered with an agricultural residence.

Meanwhile, multiple criteria with quantitative indexes to define rural and urban areas in Japan are found in the literature. For example, the OECD (2011) has a clear regional typology to differentiate the regions of a country into urban, intermediate, and rural regions based on the percentage of the population living in local units. In Japan, a local unit, which is a municipality, would be classified as rural if the population density is below 500 inhabitants/ km² (OECD, 2011). Furthermore, a Prefecture would be categorized as “predominantly rural” if the share of population living in the rural local units of this Prefecture is higher than 50 percent (OECD, 2011).

Definition of densely inhabited district (DID) and non-densely inhabited district which is applied in the National Census in Japan is another way to differentiate urban areas and rural areas. Under this classification, a densely inhabited district is defined as the one in which its units whose population density is more than 4000 inhabitants/ km² are connected and of which the total population together with its neighboring areas is more than 5000 inhabitants (Statistics Bureau of Japan, no date).

The Ministry of Agriculture, Forestry and Fisheries of Japan also classifies municipalities into different types of agricultural areas (農業地域類型) based on the criteria such as the ratio of farmlands or forests within the municipalities and the

degree of the inclination of farmlands (Ministry of Agriculture, Forestry and Fisheries of Japan No date). According to their classification, a municipality could be considered as an urban area if 1) the size of its DID including residential areas should be more than 5 percent and the population density is higher than 500 inhabitants/km², or 2) its residential land rate is higher than 60 percent and the population density is higher than 500 inhabitants/km². And accordingly, municipalities which are not following the criterion mentioned above are categorized into either flatland agricultural areas, intermediate agricultural or Mountain agricultural areas.

Table 3-2 Definition of rural area and rural population in China and Japan from the literature

Terminology	Definition in China	Definition of rural context in Japan
Rural area	- Areas which are not categorized as urban areas (National Bureau of Statistics of China, 2008)	<ul style="list-style-type: none"> - A municipality (local unit) with of which its population density is below 500 inhabitants/km²; a prefecture in which the share of its population living in the rural local units is higher than 50 percent (OECD, 2011) - Areas which not categorized as densely inhabited district (DID) (Statistic Bureau of Japan no date) - Municipalities categorized as either flatland agricultural areas, intermediate agricultural areas or mountain agricultural areas according to the classification of types of agricultural areas (Ministry of Agriculture, Forestry and Fisheries of Japan no date)
Rural population	- The population who are not categorized as urban population (National Bureau of Statistics of China, 2017)	- The population who are not living in the areas categorized as urban areas

3.2.2. Social security system and public finance in the rural areas in China and Japan

The sufficiency of the social security system and structure of public finance also vary in the rural areas in China and Japan, as China and Japan are currently in the different phases of development.

In China, the rural-urban dual system results in that population are still differentiated by their residence registration system (Hukou) into the agricultural population and non-agricultural population, which are recognized as rural population and urban population strictly in the sense of residence registration system. Agricultural population and non-agricultural population are treated differently regarding social security systems. As shown in Table 3-3, the rural social security system is insufficient with regards to the content and the targeted population, compared with the ones implemented in the urban areas.

Table 3-3 The social security system in China

Categorization of the Social security system		The main content in urban areas	The main content in rural areas
Social insurance	Pension	<ul style="list-style-type: none"> Urban employee's basic pension system Target: Workers with non-agricultural residence Finances resources: Paid by individual or enterprises + Subsidies from the government Financial method: Accumulation + imposition 	<ul style="list-style-type: none"> Rural pension system Target: People with agricultural residence Financial resources: Insurance fee paid from individuals + Subsidies from the local governments Financial method: Accumulation
	Medical insurance	<ul style="list-style-type: none"> Basic medical insurance 	<ul style="list-style-type: none"> New rural cooperative medical insurance
	Unemployment insurance	<ul style="list-style-type: none"> Unemployment insurance 	<ul style="list-style-type: none"> Not applicable
	Accident compensation insurance	<ul style="list-style-type: none"> Urban employee's accident compensation insurance 	<ul style="list-style-type: none"> Not applicable
	Childbirth insurance	<ul style="list-style-type: none"> Urban employee's childbirth insurance 	<ul style="list-style-type: none"> Not applicable
Public assistance	<ul style="list-style-type: none"> Urban minimum subsistence allowance Assistance for homeless 	<ul style="list-style-type: none"> Rural minimum subsistence allowance Rural "five guarantee" supporting system Rural medical assistance 	
Social welfare		<ul style="list-style-type: none"> Life security for militaries and their families 	<ul style="list-style-type: none"> Community nursing housing services

Translated by the author based on JICA (2009)

In Japan, people are treated equally in the social security system no matter where their residence is. Like other western welfare states, the social security system in Japan involving the health and medical care, social welfare, income security, and employment are aimed at supporting the life of all Japanese citizens “from the cradle to the grave” (See Table 3-4).

Table 3-4 The social security system in Japan

Categorization	Specific content
Health and medical care	Pregnancy checkup, Infant medical examination, School physical examination, Vaccination, Health check required by business owner, Special medical checkup, Specific health guidance, Health care for the elderly, Health insurance
Social welfare	Daycare center, extracurricular activities after school, Childcare supported by the community, Child allowance, Child rearing allowance, Social care for the children who need protection, Nursing care on sickness insurance
Income security	Bereaved family pension, Disability pension, Pension, Public assistance
Employment	Job introduction, Vocational counseling, Employment of older workers, Employment of the disabled, Public vocational training, Support for the spontaneous development of the ability of workers, Equal employment opportunity of men and women, Child-care leave, Family-care leave, Guarantee on the minimum working condition or wage, Health and safety measures for workers

Adapted by the author based on Annual Health, Labor and Welfare Report 2011 (Ministry of Health, Labor and Welfare of Japan, 2011)

Regarding the public finance in the rural areas, major tax items in China and Japan which are relevant to finance on BI are elaborated in Table 3-5. While there is no rural-urban variance in the tax system in the case of Japan, rural residents, especially farmers, in the case of China are not the main target of the taxation, as the central government has been putting effort to reduce farmers’ tax burdens through rural tax reform. Agricultural tax is a tax item charged from any individual or institutions involved in the agricultural industry based on their revenue from agricultural production activities (Agricultural tax regulation of China 1958) As the agricultural tax is repealed

in 2006, farmers almost do not contribute to the public finance through taxation on their income from agricultural activities. Consequently, the expenditure of public finance targeting the rural population have to rely on the fiscal revenue from the industries, of which many are usually located in the urban areas of the same municipality, or the allocation of funds from the superior government. The reform of the division of financial power and expenditure responsibilities between the central and local governments is currently ongoing in China (Chinese government 2016a). As the authorities on the policies such as maintaining the social security system will be relocated more on the local government at the provincial level, city level and county level, how to improve the current social security system in the rural areas based on the financial capability of the government at the local level would become a key challenge in the future.

Table 3-5 Comparison of main tax items in China and Japan

	Japan	China
Tax items	- Value-added tax (National tax) (22.3 % for local allocation tax grant)	- Value-added tax (National tax) (25% for local public financial revenue)
	- Local consumption tax (Prefectural tax)	
	- Corporate enterprise tax (Prefectural tax)	- Business tax (Local tax) (Combined in Value-added tax in 2017)
	- Corporate income tax (National tax) (33.1% for local allocation tax grant)	- Company income tax (Local tax) (State-owned enterprises are exclude from the objection of taxation)
	- Local corporate income tax (National tax) (100% for local allocation tax grant)	
	- Personal income tax (National tax) (33.1% for local allocation tax grant)	- Personal income tax (Local tax)
	- Individual resident tax	--
	- Corporate resident tax	

The differences in terms of the social security system and the public finance mentioned above should be concerned with the policy designs of BI in the rural context as well as the estimation on its cost in China and Japan. While an entire municipality in Japan is possibly able to be categorized as either an urban area or rural area, the

governance at the municipal level in China commonly contains both the rural and urban parts within a municipality.

Considering the differences in defining the rural context in China and Japan, and the fact that BI is a human-targeted policy, despite the rural context is the prerequisite of discussing the implementation of BI in this study, specific interpretation on the targets of this policy, which is the BI recipient, is required for the cost estimation. In the case of China, while BI was considered to be implemented in the rural areas of a selected municipality, and accordingly the rural population in the sense of residence registration was considered as BI recipients. In the meantime, all the residents in a selected municipality which is considered as a rural area were defined to be the BI recipients in the case of Japan.

3.3. Methodology

3.3.1. Method for estimating the cost of implementing BI

Previous studies considered that the social security system should be replaced if the BI was implemented (Van Parijs, 1991) which include, for example, means-tested minimum income, family allowance, unemployment benefit, disability benefit, child support grant and pension system (Bhorat, 2002; Samson, 2002; Vanderborght, 2004). Furthermore, adjustment on the existing tax system is also argued as another way to finance the implementation of BI which often contains the abolition of the tax deduction or makes the rate of income tax to be flat (Clark and Kavanagh, 1996). Setting new types of tax items, such as energy tax (Grosurth, 1998) environmental tax (Perkio, 2014) or property tax (Perkio, 2014) are also raised in various BI proposals as a pathway to adjustment the tax system to finance BI.

In this research, the cost of implementing BI was estimated based on the equation (eq 3.1) below:

$$Cost_{(BI)} = TDA_{(BI)} - SE_{(Policies\ replaced\ by\ BI)} - ITR_{(adjustment\ on\ tax)} \quad (eq\ 3.1)$$

Where $TDA_{(BI)}$ refers to the total amount of BI distributed to all BI recipients.

$SE_{(Policies\ replaced\ by\ BI)}$ means the saved expenditure of all the policies which could be replaced by BI, which include their payments and administrative cost.

$ITR_{(adjustment\ on\ tax)}$ refers to the increased tax revenue through the adjustment on the tax system due to the implementation of BI. The replacement on the policies and the adjustment on the tax system in rural Ganzhou and Sado were designed respectively according to the actual situation in these two case studies areas.

Furthermore, the total distributed amount was estimated as follows (eq 3.2):

$$TDA_{(BI)} = BI_{(per\ capita)} \times P_{(BI\ recipient)} \quad (eq\ 3.2)$$

Where $BI_{(per\ capita)}$ represent the payment of BI to each BI recipient and

$P_{(BI\ recipient)}$ means the population of BI recipients. $BI_{(per\ capita)}$ and

$Population_{(BI\ recipient)}$ were included in the design of BI scenarios which would be explained in the latter part of this chapter.

Meanwhile, the method for calculating $SE_{(Policies\ replaced\ by\ BI)}$ and

$ITR_{(adjustment\ on\ tax)}$ were also elaborated together with the rationale of the design on BI scenarios in the latter part of this chapter.

3.3.2. Case studies areas for cost estimation: Rural Ganzhou and Sado

As mentioned earlier, rural areas in Ganzhou and the entire Sado were selected as two case studies representing the rural context in China and Japan respectively.

Ganzhou is located in the South part of Jiangxi Province, which is an inland province located in Southern China (See Figure 3-1). The administrative divisions of Ganzhou consist of 3 districts and 15 counties, of which the total size is about 39379.64 km². The rural population in Ganzhou has reached 7.32 million in 2015, which occupied for 75 percent of the total population in this city. As shown in Figure 1, Sado is located on Sado island which belongs to Niigata Prefecture, Japan. The total size of Sado is 855.69 km². In 2016, the population of Sado is 57,255, and its population density is merely 67 inhabitants/ km².

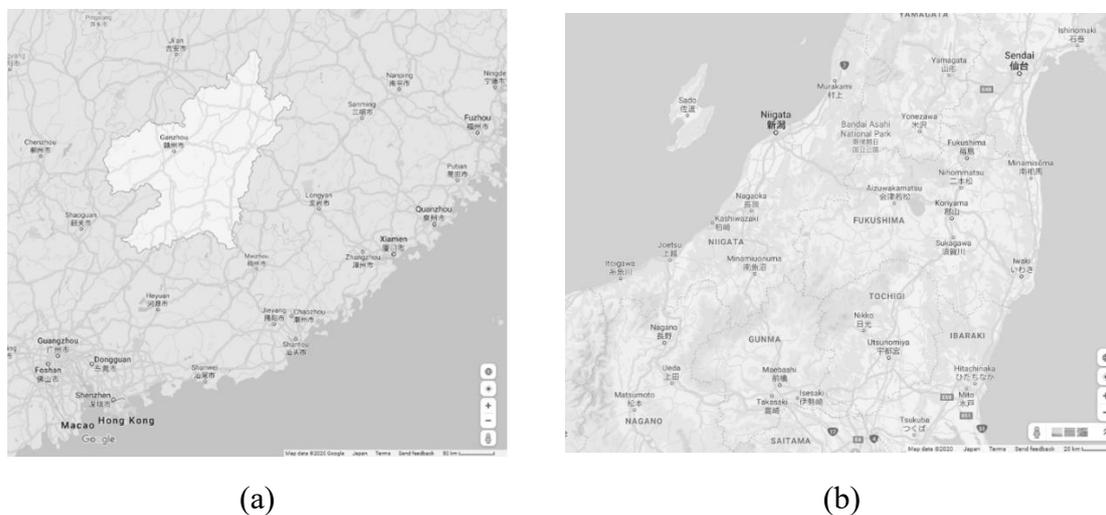


Figure 3-1 Map of Ganzhou (a) and Sado (b)

Source: Google map, Access date 2020. April 20th

The reason to choose Ganzhou and Sado is that they are typical examples of the rural areas in China and Japan respectively. First, the annual income of the population living in rural areas of Ganzhou city per capita is 7,786 RMB in 2015, which is far

below the national average amount which is 23,821 RMB/ year (Ganzhou Yearbook, 2016). Similarly, compared with the average among of the annual income per capita in Japan, which is 4.204 million JPY in 2016, the annual income in Sado per capita in the same year is on average 2.044 million JPY.

Furthermore, the local public finance also largely requires budget allocation from the superior governments. In Ganzhou, merely 41% of the fiscal revenue comes from the various taxation within the municipality in 2016 (See Figure 3-2(a)). Meanwhile, 61.1% of the fiscal revenue in Sado in 2018 was estimated to be generated from the local allocation tax and national treasury disbursements given by the central government, and prefectural disbursements given by the Niigata Prefectural government (Figure 3-2(b)).

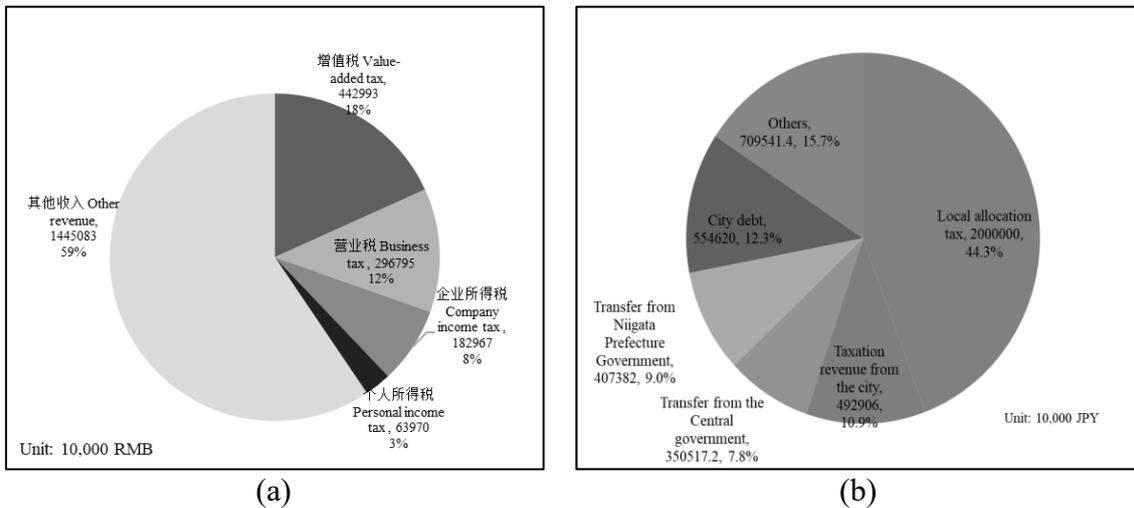


Figure 3-2 Public fiscal revenue of Ganzhou (2016) (a) and Sado (2018) (b)

Made by the author based on the data from Ganzhou Yearbook (2017) and the General account budget of Sado (2018)

Following the rural-urban dual structure, the social security system in China currently remains divided into the one in urban areas and the one in rural areas separately. Like other cities, the rural social security system in Ganzhou consists of rural

social insurance, social assistance, and other welfare policies (e.g. community service). The social insurance includes both rural pension system and medical insurance. The social assistance includes assistance policies such as rural minimum subsistence allowance and Five-guarantee system, of which the purpose is to maintain the minimum standard of rural poor's livelihood. The details of the social security system are shown in Table 3-3.

Furthermore, in 2016, a national plan called Targeted Poverty Alleviation was committed by the Chinese Communist Party government aiming to address the rural poverty issue by 2020 from various perspectives including, for example, livelihood, education, healthcare, employment, and public infrastructure (Chinese Government, 2016b). Hence, municipal governments have been given authorities to issue new policies severally on their own for addressing the poverty issue in the rural areas within the municipalities according to the social-economic status and industrial characteristics. In Ganzhou, the municipal government has been issuing new policies in the rural areas following the national plan of Targeted Poverty Alleviation, and some of them are functioning as supplemented policies to the existing rural social security system. The details of the policies issued in rural areas in Ganzhou for achieving the Targeted Poverty Alleviation are shown in Table 3-6.

As mentioned earlier, the social security system in Sado is the same to other areas in Japan, which contains the health and medical care, social welfare, Income security and employment (See Table 3-6). The health and medical care include medical insurance universally for all the residents in Japan, and health check for different targeted population. Social welfare provides various social services and subsidies for caring children and disabled people. Income security includes basic pension and public

assistance. Various services and employment insurance are also provided to ensure employment.

Table 3-6 Policies issued in rural areas in Ganzhou following the national plan of Targeted Poverty Alleviation in rural China (Policies in the existing rural social security system in Ganzhou are excluded)

Categorization of the policies	Content of the policies	Responsible department(s) in the Gov. of Ganzhou City
Industry	Subsidies on supporting local agriculture, policies on supporting the development of rural e-commerce, photovoltaic power generation, and tourism	Municipal Agricultural Bureau, Municipal Forestry Bureau, Municipal Business Bureau, Municipal Development and Reform Commission, Municipal Committee of Tourism Development
Relocation	Subsidies on supporting the relocation of poor rural household	Municipal Office of poverty alleviation and migration
Finance	Policies loosening credit and loan for the development of local industry	Municipal Bureau of Financial Work
Employment	Policies on starting up in rural areas, Rain Plan	Municipal Human Resources and Social Security Bureau, Office of poverty alleviation and migration
Health	Government payment of basic medical insurance fee on behalf of rural poor Government payment of critical illness insurance on behalf of rural poor Government payment of commercial supplementary medical insurance on behalf of rural poor Final special medical assistance	Municipal Health Insurance Bureau
Education	Tuition fee exemption in High school, Scholarship, Student loan and other subsidies on college students, Nutrition lunch for students at the stage of compulsory education	Municipal Education Bureau

Made by the author based on the interviews with the Municipal Government of Ganzhou

Moreover, the Japanese government released a national plan called the General Strategy of Overcoming Population Decline and Vitalizing Local Economy (Machi Hito Shigoto Sousei Sougou Senryaku) in 2013, in order to address the issue of rural depopulation and aging society in Japan. Guided by this national plan, each of the municipalities makes its own policies by utilizing local resources to create a sustainable

society. The details of the General Strategies of Overcoming Population Decline and Vitalizing Local Economy in Sado are elaborated in Table 3-7.

Table 3-7 Specific content of Strategy of Overcoming Population Decline and Vitalizing Local Economy in Sado

Goal	Content
1. Utilization of the resource on the island, create jobs for stabilizing the local industry	<ul style="list-style-type: none"> • Stabilizing the management of agriculture through promotion of producing rice with high quality • Revitalizing the local gardening and stockbreeding by improving the quality of products and diversifying the channels for sales • Revitalizing the local forestry supporting the recycling society • Revitalizing the local fishery industry through enhancement on the brand power of the products and on sales strength • Promotion of employment of young people through starting businesses, second-time startup, and invitation of enterprises • Construction of mechanism for adding of values and for sales based on a sixth sector industrialization • Fostering of talents for revitalizing the local industry
2. Promotion of communication and sightseeing for the attractiveness and hospitality of the island	<ul style="list-style-type: none"> • Advocating the attractiveness of the island • Improvement for round-trip sightseeing • Creation of hospitality and environment for accepting tourists
3. Improvement of the environment for being easy to live and support on young people from meeting to employment at the whole-island scale	<ul style="list-style-type: none"> • Support on from meeting to marriage • Creation of environment for being easy to get birth and raising children • Strengthening the support on the school education and entering school • Promotion of migration and settlement
4. Creation of the unique sustainable regions and securing of the safety and relief in the island	<ul style="list-style-type: none"> • Creation the centers for regions and revitalizing the regions • Improvement of mechanism for being able to live in the region safely and peacefully • Preparation of mechanism for the regional disaster prevention and improvement of centers for activity bases

Made by the author based on Plan of Revitalization Strategies of Overcoming Population Decline and Vitalizing Local Economy in Sado City 2015 (Sado City Government 2015)

3.3.3. Rationale of designing the BI scenarios and adjustments on relevant policies and taxation systems

As mentioned previously, various BI scenarios were designed as the first step for the cost estimation. Each scenario is determined by 1) the amount of payment per capita

and the number of targeted recipients, and 2) corresponding replacement on the relevant policies and the adjustment on the tax system in the case study areas due to the implementation of BI.

Regarding the design of BI scenarios, two types of payment were decided which are full BI (FBI) and partial BI (PBI). While the amount of FBI is decided following the BI definition that BI should be set at the level which is enough to cover one's basic needs (Jordan, 1988; Baker, 1992; MacKay, 2001), the amount of PBI is decided at the level merely enough to cover one's expenditure on food. The setting of the amount of FBI and PBI referred to the rural minimum subsistence allowance in Ganzhou and the standard of public assistance in Sado respectively.

Furthermore, the population in the case study areas were categorized by age into two groups, which are minor residents and adult residents including the ones at working age and the ones at retiring age for determining the number of BI recipients in different scenarios.

The policies of which the function is considered able to be altered by BI would be replaced. Policies from the social security system in rural Ganzhou and Sado were first determined to be replaced. Moreover, the replacement of policies also contains the ones for addressing the poverty issue in rural Ganzhou and the ones for addressing the issue of rural depopulation and aging society in Sado. The saved expenditure on all the replaced policies includes their payments and the relevant administrative cost.

Selection on the tax items for the adjustment on the tax system in Ganzhou and Sado follows two principles, which are 1) concerns on the livelihood of the residents in the case study area have been included in the tax levy of a selected tax item, and 2) the adjustment on a selected tax item should accord with the future vision of the rural

society basic life of all the local residents should be secure meanwhile the innovation is easy to be triggered.

Specific proposals on adjusting each of the selected tax items in both of the two case studies are either abolition on part of the income deduction or a direct increase of the tax rate. The rationale for abolishing a certain income deduction item is that BI would provide the same benefit to secure one's life as concerned in this income deduction item. Meanwhile, the tax rate of a selected tax item was also raised according to their previous setting or the limited tax rates legitimized by law.

3.3.4. The design of BI scenarios and corresponding replacement on the polices and adjustment on the tax system in the case study areas

In the case of rural Ganzhou, four BI scenarios were designed and the amount of BI payment for each recipient in each of the scenarios was shown in Table 3-8. The first scenario (SG1) is that all the adult residents above 18 years old receive 305 RMB monthly while all minor residents under 17 years old receive 93 RMB monthly. The scenario follows the practice in the India BI pilot project (IND (1)) or Eight's BI pilot project in Uganda (UGA (1)) defining the amount of BI according to residents' age (See Table 2-3). The second scenario (SG2) is designed as all the adult residents above 18 years receive 305 RMB monthly while minor residents do not receive any payment as their livelihood is assumed able to rely on their parents. Referring to the Finnish BI experiment (FIN (1)) (See Table 2-3), the third scenario (SG3) is designed to only give all the adult residents in the working age (18-59 years old) a payment of 305 RMB monthly. The fourth scenario (SG4) is that all the adult resident in working age (18-59 years old) and after retiring age (above 60 years old) would receive 305 RMB and 93

RMB respectively in each month, considering that the level of pension in rural Ganzhou is on average less than the proposed BI amount in this research.

Table 3-8 Proposed BI payment per capita in all the BI scenarios in rural Ganzhou

Scenario	Type of BI packages	Age of receiver ¹	Proposed BI per capita (RMB/ capita/ month)
SG1	Full basic income (FBI)	0-17	93
		18-	305
SG2	FBI	0-17	0
		18-	305
SG3	FBI	0-17	0
		18-59	305
		60-	0
SG4	FBI+PBI	0-17	0
		18-59	305
		60-	93

Similarly, three scenarios were also designed in the case of Sado. As shown in Table 3-9. Following the same reasons to design SG1, the first scenario in Sado (SS1) provides 100,000 JPY monthly to all the adult residents above 20 years old and 25,000 JPY to all the minor residents (0-19 years old). The second scenario (SS2) ensures a payment of 100,000 JPY to all the adult residents while minor residents do not receive any payment as their livelihood is assumed to be covered by their parents. In the scenario 3 (SS3), only adult residents at working age (20-64 years old) were able to receive 100,000 JPY monthly. The livelihood of adult residents at the retiring age (above 65 years old) are considered still to be covered by the existing pension system. Considering that the average level of pension per capita is higher than the proposed amount of BI in this research, there is no need to set a scenario especially providing PBI to elder residents.

¹ The legal age for adult in China is 18 years old. The retired age in China in this study is defined as 60 years old

Table 3-9 Proposed BI payment per capita in all the BI scenarios in Sado

Scenario	Type of BI packages	Age of receiver ¹	Proposed BI per capita (JPY/ capita/ month)
SS1	Full basic income (FBI)	0-19	25,000
		20-	100,000
SS2	FBI	0-19	0
		20-	100,000
SS3	FBI	0-19	0
		20-64	100,000
		65-	0

Furthermore, the adjustments on the relevant policies and taxation system are also designed corresponding to each of the BI scenarios. In rural Ganzhou, policies which are considered to be adjusted contain 1) parts of the existing rural social security system and 2) parts of supplemented policies for the existing rural social security system implemented following the national plan of Targeted Poverty Alleviation. The former includes rural pension system, rural minimum subsistence allowance, and five-guarantee system while the latter contains some of the government payments on behalf of rural poor. Rural cooperative medical insurance and rural medical assistance are considered to remain as we assumed that BI is possibly insufficient to cover one's expenditure on the health issue. The details of all the replaced policies are shown in Table 3-10.

¹ Legal age for adult in Japan is equal to or above 20 years old. The retired age in Japan in this study is defined as 65 years old.

Table 3-10 List of all the relevant policies considered to be replaced by BI in rural Ganzhou

Categorization of the policies considered to be replaced by BI		Name of policies
The rural social security system	Rural social insurance policies	Rural pension system
	Rural social assistance policies	Rural minimum subsistence allowance
		Five-guarantee system
Supplementary policies for the rural social security system (Guided by the national plan of Targeted Poverty Alleviation)		Government payment of rural pension fee on behalf of rural poor
		Government payment of basic medical insurance fee on behalf of rural poor
		Government payment of critical illness insurance on behalf of rural poor
		Government payment of commercial supplementary medical insurance on behalf of rural poor

Meanwhile, in Ganzhou, the rate of company income tax is considered to be raised from the current 25% to 33%. The current tax rate was set in 1994. Personal income tax and value-added tax are not considered as the tax items to be adjusted. For the former, it is because the tax revenue from the personal income tax is limited, compared with tax items at the municipal level, and also because the individual tax system in rural areas is not as completed as in the rural areas. Meanwhile, the reasons for not increasing value-added tax is due to the concern that it might worsen the local economy.

In Sado, policies designed to be replaced are from the existing social security system and the General Strategy of Overcoming Population Decline and Vitalizing Local Economy in Sado (Sado-Shi Machi Hito Shigoto Sousei Sougou Senryaku) (Sado City Government 2015). Specifically, these policies include basic pension system, public assistance, child allowance, child-rearing allowance, unemployment insurance, and Goal 3 and Goal 4 of the General Strategy of Overcoming Population Decline and Vitalizing Local Economy (See Table 3-11). For the same reason as the case of rural Ganzhou, national health insurance is not included.

Table 3-11 List of all the relevant policies considered to be replaced by BI in Sado

Categorization of the policies considered to be replaced by BI		Name of the policies
National policies	Income security	National pension and welfare pension
		Public assistance
	Social welfare	Child allowance
		Child-rearing allowance
Employment	Unemployment insurance	
Local policies	The strategy of Overcoming Population Decline and Vitalizing Local Economy in Sado	Goal 3
		Goal 4

Tax items in the case of Sado considered to be adjusted to contain the individual income, individual resident tax, corporate income tax, corporate resident tax (See Table 10). The specific adjustment to increase the tax revenue from the personal income tax and the individual resident tax is to abolish part of the income deduction. Meanwhile, the rates of corporate income tax and corporation resident tax were raised according to their limited tax rates legitimized by relevant law or the previous tax rate. The detailed proposals on adjusting the tax system in Sado are elaborated in Table 3-12.

Table 3-12 Proposal for the adjustment on the tax system due to the implementation of BI

Tax items		Specific adjustment for increasing tax revenue
Individual income tax		Abolition of part of the income deduction
Individual resident tax	Individual municipal tax	Abolition of part of the income deduction
	Individual prefectural tax	
Corporate income tax		19% (Small and medium corporations) & 23.2% (Ordinary corporation) → 30% (Previous tax rate in 2011, (H24))
Corporate resident tax	Corporate municipal tax	Corporation levy: 12.1% (Current) →14.7% (Previous tax rate in 2013, (H26))
	Corporate prefectural tax	Corporation levy: 3.2% →4% (Current limited tax rate)

The method for calculating the increased tax revenue from the abolition of part of the income deduction in the personal income tax and individual resident tax was developed based on the previous work of Uemura (2014) on calculating the tax loss due to the income deduction.

First, the formulas are shown as follows.

$$Y_{1i} = Y_i/I_i \quad (\text{eq 3.3})$$

$$R_{1is}^o = (Y_{1i} - k_s) \times t - d \quad (\text{eq 3.4})$$

$$R_{is}^o = R_{1is}^o \times I_i \quad (\text{eq 3.5})$$

$$L_{is} = R_{is}^o - R_{is} \quad (\text{eq 3.6})$$

Where Y_{1i} means the average annual income per capita in Sado at year i , which is calculated as the total amount of annual income in Sado at year i (Y_i) is divided by the total population of taxpayers (I_i) in Sado at year i . R_{1is}^o refers to the average amount of personal income tax that each taxpayer in Sado is supposed to pay in the year i , provided that parts of the income deduction items of the individual income tax were abolished. k_s is the amount from the income deduction items which are principally considered not abolished in the BI scenarios. However, as the amount of this part of the income deduction is assumed applied less frequently than the ones considered to be abolished, the value of k_s is set at 0 for the convenience of the entire calculation. Following the rapid calculation table of the individual income tax published by the National Tax Agency of Japan (See table 3-13), t is the tax rate of the individual income tax, and d refers to the deductible amount. R_{is}^o refers to the total amount of individual income tax that all the residents are supposed to pay in the year i , provided that parts of the income deduction items of the individual income tax were abolished, and it was thus calculated by multiplying R_{1is}^o and I_i together. Finally, the gap (L_{is}) between R_{is}^o and R_{is} , which is the actual total amount of personal income tax paid in Sado in the year i , is the increased tax revenue from the abolition on parts of the income deduction in

the personal income tax.

Table 3-13 The rapid calculation table of the individual income tax in Japan

The taxable amount of income (JPY)	Tax rate	Amount of deduction (JPY)
Less than 1,950,000	5%	0
1,950,000 – 3,300,000	10%	97,500
3,300,000 – 6,950,000	20%	427,500
6,950,000 – 9,000,000	23%	636,000
9,000,000 – 18,000,000	33%	1,536,000
18,000,000 – 40,000,000	40%	2,796,000
40,000,000 -	45%	4,796,000

The individual resident tax consists of income-based levy and per-capita-based levy, and the increased tax revenue from the abolition on the income deduction in this tax item was calculated following a similar process. The formulas are shown as follows.

$$R_{1ij}^o = (Y_{1i} - k_j) \times g \quad (\text{eq 3.7})$$

$$R_{ij}^o = R_{1ij}^o \times I_i + (M_p + M_s) \times I_i' \quad (\text{eq 3.8})$$

$$L_{ij} = R_{ij}^o - R_{ij} \quad (\text{eq 3.9})$$

Where R_{1ij}^o means the average amount of individual resident tax that each of taxpayers is supposed to pay in the year i , if parts of the income deduction items were abolished in the income-based levy of the individual resident tax. g is the tax rate of individual resident tax in Sado. Because of the same reason for the calculation in the personal income tax, the amount from the income deduction items which are considered to remain (k_j) was assumed to be 0. Accordingly, the total amount of the individual resident tax with the abolition of income deduction that all the taxpayers in Sado are supposed to pay R_{ij}^o is calculated by aggregating the amount from the total income-based levy and per-capita based levy together, as shown in step (2). M_p and M_s are the

amounts for the per-capita based levy decided by the prefecture government and municipality government accordingly. I_i and I_i' refer respectively to the number of taxpayers who are paying the income-based part and per-capita based part of the individual resident tax in the year i . Despite the value of I_i and I_i' are possibly different as one may merely pay the per-capita based part of the individual resident tax according to his/ her low-income level, these two parameters are assumed to be the same due to the lack of data and the convenience of calculation. Finally, the increased tax revenue from the abolition of the income deduction in the individual resident tax is estimated as the gap between R_{ij}^o and R_{ij} .

3.3.5. Data collection

The whole cost estimation in the two case study areas was conducted based on the secondary data from diverse sources. For the calculation in rural Ganzhou, data about rural population and tax revenue is collected from the Ganzhou yearbook 2016. Data about the expenditure of all the policies considered to be adjusted is collected from the General final account list of Ganzhou, annual Ganzhou government call reports, and other government documents.

For the calculation in Sado, data about the population is collected from the National Census held in 2015 (National Bureau of Statistics of Japan 2015). The expenditure of all the policies considered to be adjusted is provided in the General account budget document of Sado in 2018 (Sado City Government 2018), the statistic yearbook of Niigata Prefecture 2017 (Niigata Prefecture Government 2018), data from the Monthly report of Labor market in 2017 (Niigata Labor Bureau 2017), the Monthly

report of Pension at the municipal level as of March 2018 (Ministry of Welfare, Health and Labor of Japan No date) and the Overview of municipal administration of Sado in 2016 (Sado City Government 2016). The total amount of annual income and number of individual resident taxpayers in Sado, 2016 are found in Statistic Observation of Municipalities, 2018 published by the Statistic Bureau of Japan (2018). Data about the individual income tax in Sado are obtained from the statistics of tax revenue in 2017 from the National Tax Agency of Japan (National Tax Agency of Japan no date).

3.4. Results

3.4.1. Total distributed amount of BI in all the BI scenarios

The results of the total distributed amount of BI in all the scenarios in rural Ganzhou and Sado are shown in Table 3-14 and Table 3-15. In rural Ganzhou, the highest total distributed amount is 13,870,678,596 RMB (equivalent to about 1.97 billion USD, current price, the same below) in SG1, while the lowest total amount is 10,142,401,680 RMB (equivalent to about 1.44 billion USD) in SG3.

Table 3-14 Total payment of BI in each Scenario in rural Ganzhou

Scenarios	Type of package	Proposed BI per capita (RMB/capita/ month)	Age of receiver	Number of receivers	Distributed amount (RMB/year)	Total distributed amount of BI (RMB/Year)
SG1	PBI+BI	93	0-17	1250178	1,395,198,494	13,863,768,579
		305	18-	3406713	12,468,570,085	
SG2	BI	0	0-17	1250178	0	12,468,570,085
		305	18-	3406713	12,468,570,085	
SG3	BI	0	0-17	1250178	0	10,136,323,101
		305	18-59	2769487	10,136,323,101	
		0	60-	637226	0	
SG4	BI+PBI	0	0-17	1250178	0	10,847,467,264
		305	18-59	2769487	10,136,323,101	
		93	60-	637226	711,144,162	

In Sado, the highest total distributed annual amount is 61,409,700,000 JPY (equivalent to about 549.81 million USD, current price) in SS1, while the lowest total

distributed annual amount is 31,206,000,000 JPY (equivalent to about 279.41 million USD) in SS3.

Table 3-15 Total payment of BI in each scenario in Sado

Scenario	Type of package	Proposed BI per capita (JPY/ capita/ month)	Age of Receiver	Number of receivers	Distributed amount (JPY /year)	Total distributed amount of BI (JPY / year)
SS1	PBI+BI	25,000	0-19	8,107	243,210,000	61,409,700,000
		100,000	20-	49,148	58,977,600,000	
SS2	BI	0	0-19	8,107	0	58,977,600,000
		100,000	20-	49,148	58,977,600,000	
SS3	BI	0	0-19	8,107	0	31,206,000,000
		100,000	20-64	26,005	31,206,000,000	
		0	65-	23,143	0	

3.4.2. Saved expenditure of all the policies replaced by BI in rural Ganzhou and Sado

According to the setting in the BI scenarios, the saved expenditure of the policies which are considered to be replaced by BI was estimated in Rural Ganzhou and Sado respectively. In Rural Ganzhou, the results in Table 3-16 shows that the highest number of the saved expenditure is 2,602,264,218 RMB (equivalent to 378.3 million USD) in SG1 and SG2, while the lowest saved expenditure is 1,514,045,100 RMB (equivalent to 220 million USD) in SS3 and SG4 (See Table 3-16).

Table 3-16 Saved expenditure of the policies replaced by BI in rural Ganzhou

Name of the policies replaced by BI	Saved expenditure of the policies replaced by BI in different scenarios (Unit: RMB)			
	SG1	SG2	SG3	SG4
Rural pension system	1,088,219,118	1,088,219,100	--	--
Rural minimum subsistence allowance	918,380,000	918,380,000	918,380,000	918,380,000
Five-guarantee system	194,870,000	194,870,000	194,870,000	194,870,000
Government payment of rural pension fee on behalf of rural poor	35,115,100	35,115,100	35,115,100	35,115,100
Government payment of basic medical insurance fee on behalf of rural poor	101,670,000	101,670,000	101,670,000	101,670,000
Government payment of critical illness insurance on behalf of rural poor				
Government payment of commercial supplementary medical insurance on behalf of rural poor	60,260,000	60,260,000	60,260,000	60,260,000
Administrative cost of the policies replaced by BI (RMB)	203,750,000	203,750,000	203,750,000	203,750,000
Total saved expenditure of the policies replaced by BI (RMB)	2,602,264,218	2,602,264,200	1,514,045,100	1,514,045,100

In the case of Sado, it is estimated that the highest saved expenditure of the policies replaced by BI is 26,253,280,135 JPY (equivalent to 243.50 million USD) in SS1 and SS2, while the lowest saved expenditure is 2,778,532,135 JPY (equivalent to 25.6 million USD) in SS3 (See Table 3-17).

Table 3-17 Saved expenditure of the policies replaced by BI in each scenario in Sado

Policies potentially replaced by BI			Saved expenditure of the policies replaced BI in of the scenarios (JPY)					
			SS1		SS2		SS3	
			Payment	Admin. cost	Payment	Admin. cost	Payment	Admin. cost
National policies	Income security	Basic pension	15,201,867,000	30,171,000	15,201,867,000	30,171,000	--	--
		Welfare pension	8,242,710,000		8,242,710,000		--	
		Public assistance	584,108,000	57,908,000	584,108,000	57,908,000	584,108,000	57,908,000
	Social welfare	Child allowance	654,967,000	125,330,000	654,967,000	125,330,000	654,967,000	125,330,000
		Child rearing allowance	201,835,000	58,749,000	201,835,000	58,749,000	201,835,000	58,749,000
Employment	Unemployment insurance	364,152,135	--	364,152,135	--	364,152,135	--	
Local policies	General Strategy of Overcoming Population Decline and Vitalizing Local Economy in Sado	Goal 3	345,043,000	--	345,043,000	--	345,043,000	--
		Goal 4	386,440,000	--	386,440,000	--	386,440,000	--
The total amount of saved expenditure (JPY)			26,253,280,135		26,253,280,135		2,778,532,135	

3.4.3. Potential increased tax revenue due to the implementation of BI

In the case of rural Ganzhou, the potential increased tax revenue in all the four BI scenarios (SG1, SG2, SG3, and SG4) is 146,373,600 RMB (equivalent to about 21.82 million USD, current price) which is all from raising the tax rates of the company tax in the entire Ganzhou municipality.

Meanwhile, as shown in the Table 3-18, the potential increased tax revenue in all the BI scenarios (SS1, SS2, and SS3) in Sado is estimated at 3,582,074,240 JPY (equivalent to about 32.07 million USD) through the abolition of an income deduction in the individual income tax and the individual resident tax, and through raising the rates of the corporation tax and corporation resident tax.

Table 3-18 Estimated increased tax revenue through the adjustment on the existing tax system in Sado due to the implementation of BI

Tax items		Estimated Amount of increased tax revenue (JPY)
Individual income tax		1,007,039,600
Individual resident tax	Individual municipal tax	2,336,932,267
	Individual prefectural tax	
Corporate tax		224,882,930
Corporate resident tax	Corporate municipal tax	13,219,438
	Corporate prefectural tax	
The total estimated amount of increased tax revenue (JPY)		3,582,074,235

3.4.4. Estimated current cost of implementing BI in the case study areas

Finally, the results about the estimated cost of implementing BI based on the design of all the scenarios in rural Ganzhou and Sado are indicated in Table 3-20 and Table 3-21. As shown in Table 3-19, it is estimated that SG1 covering all the residents in the rural area at all ages by providing them BI or PBI separately would cost 11,115,130,761 RMB (equivalent to about 1.57 billion USD), which is the highest number among all the BI scenarios in the case of rural Ganzhou. Meanwhile, the lowest

cost of implementing BI is estimated at 8,475,904,401 RMB (equivalent to 1.20 billion USD) in SG3 which only gives BI to the resident at the working age.

Table 3-19 Estimated cost of implementing BI in rural Ganzhou

Scenario	Total payment of BI (RMB/ Year) (a)	Cost of policies potentially replaced by BI (RMB/ Year) (b)	Potentially increased tax revenue (RMB/ Year) (c)	Cost of implementing BI (RMB/ Year) (a-b-c)
SG1	13,863,768,579	2,602,264,218	146,373,600	11,115,130,761
SG2	12,468,570,085	2,602,264,200	146,373,600	9,719,932,285
SG3	10,136,323,101	1,514,045,100	146,373,600	8,475,904,401
SG4	10,847,467,264	1,514,045,100	146,373,600	9,187,048,564

In the case of Sado, SS1 which gives FBI to all is estimated to cost 31,574,345,630 JPY (equivalent to about 294.4 million USD), which is the highest among all of the three scenarios (See Table 3-20). Meanwhile, the result in SS3 shows that the lowest cost of implementing BI is estimated at 24,845,393,630 JPY (equivalent to about 231.0 million USD) if the BI is only given to the residents at working age (See Table 3-20).

Table 3-20 Estimated cost of implementing BI in Sado

Scenario	Total distribute amount of BI (JPY/ Year) (a)	Cost of policies potentially replaced by BI (JPY/ Year) (b)	Potentially increased tax revenue (JPY/ Year) (c)	Cost of implementing BI (JPY/ Year) (a-b-c)
SS1	61,409,700,000	26,253,280,135	3,582,074,235	31,574,345,630
SS2	58,977,600,000	26,253,280,135	3,582,074,235	29,142,245,630
SS3	31,206,000,000	2,778,532,135	3,582,074,235	24,845,393,630

3.5. Discussion

It is obvious that the cost in all the scenarios in rural Ganzhou and Sado calculated in the previous section is not a small amount of money for the local government both in Ganzhou and Sado. In the case of rural Ganzhou, the cost of implementing BI corresponding to each of the scenarios requires a budget equal to 13.8% to 18.1% of the total financial expenditure of the Ganzhou City Government in 2015 (See Table 3-21).

Table 3-21 Comparison between the cost of implementing BI in each scenario and the total financial expenditure of the Ganzhou City Government (2015)

Scenario	Cost of implementing BI (RMB/ Year) (d) (equal to a-b-c estimated in Table 3-20)	Total expenditure revenue of Ganzhou City Government (2015) (RMB) (e)	Ratio of cost of implementing BI on the total financial expenditure of Ganzhou [d/e] ×100%
SG1	11,115,130,761	61,496,550,000	18.1%
SG2	9,719,932,285		15.8%
SG3	8,475,904,401		13.8%
SG4	9,187,048,564		14.9%

Meanwhile, in the case of Sado, an additional budget equivalent to 55.03% to 69.93% of the total financial revenue of Sado Government in 2018 is of necessity for the implementation of BI (See Table 3-22).

Table 3-22 Comparison between the cost of implementing BI in each scenario and the total financial revenue of Sado Government (2018)

Scenarios	Cost of implementing BI (JPY/ Year) (d) (Equal to a-b-c estimated in Table 3-21) (a-b-c)	Total financial expenditure of Sado City Government (2018) (JPY) (Source: the General account budget of Sado 2018) (e)	Ratio of cost of implementing BI on the total financial expenditure of Sado Government (2018) [d/e] ×100%
SS1	31,574,345,630	45,149,666,000	69.93%
SS2	29,142,245,630		64.55%
SS3	24,845,393,630		55.03%

The comparisons between the cost of implementing BI and the total expenditure of the government in the case of rural Ganzhou and Sado indicated that financial deficit for the local public finance would be created if BI is considered to be implemented at present. Furthermore, Figure 3-3 shows that public financial expenditure would surpass the current public financial revenue of local government both in Ganzhou and Sado, provided the BI scenario with the lowest cost was implemented. This implies that the cost of BI is not affordable merely based on the current financial revenue of the local government in both of the case study areas. Hence, a new budget independent from the existing financial revenue of the local governments is thus required to finance the implementation of BI in both of the two case study areas.

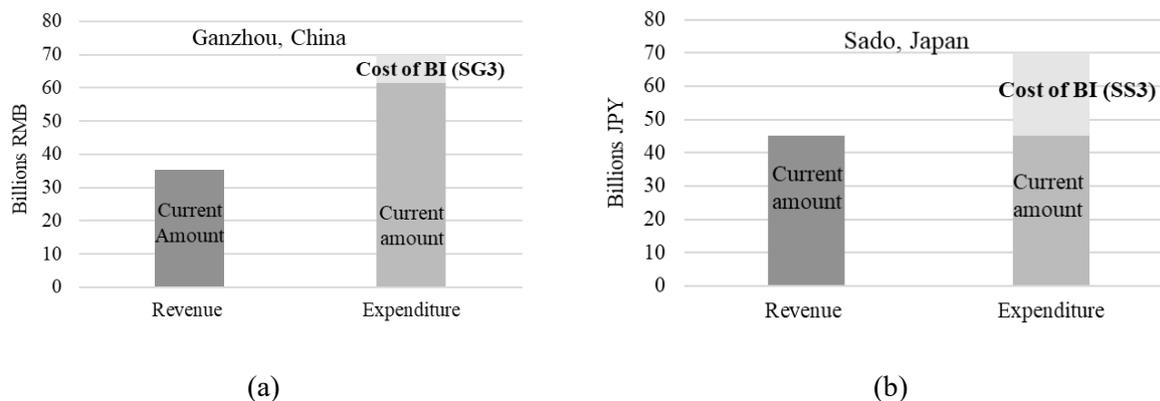


Figure 3-3 The public financial revenue and expenditure of local government if the BI scenario with the lowest cost (SG3 for Rural Ganzhou and SS3 for Sado) was implemented at present in rural Ganzhou (a) and Sado (b)

Made by the author based on the result of BI cost calculation and the data from Ganzhou yearbook 2016 and budget document of Sado

Existing literature provided clues on how to generate new financial sources by launching a new type of tax or increase the consumption tax. However, since the BI discussed in this research is not considered to be implemented universally at the national level, either of the methods mentioned above would possibly bring negative impacts on the local economy of the implemented areas. For example, radically uprising the rate of consumption tax in a certain area where BI is implemented may, on the contrary, lead to the increasing use of online shopping, and consequently, contribute to the flow-out of the wealth.

Since it has been mentioned in Chapter 1 that BI is not intended to be implemented universally in all the rural areas either in China or Japan. Instead, BI is ideally only implemented in the rural areas facing the “worst situation” within a country. Hence, I argue that numerically it is possible to let the superior government including the central government or provincial/ prefecture government in China and Japan provide funding covering the budget gap of the local public finance respectively.

The second approach is to create new tax items or rising the rate of existing tax

rates in urban areas for the purpose of, for example, managing the land in rural areas. This approach aims to create a new cash flow in public finance from urban areas to rural areas. The establishment of a new tax item can refer to the Hometown tax (Furusato nozei) donation program in Japan. BI can be settled as one of the programs developed by the local municipality and urban residents can donate to this program. The amount of donation can be returned to the urban residents through the deduction of other taxation items such as individual income tax.

The third approach is to issue bonds through the government for supporting the settlement and business initiations of people who can trigger innovation. This is due to the concerns that strengthening the linkage between BI and local economic development is of necessity for applying this approach. In China, as it is common that the provincial governments issue bonds based on their credits usually for the purpose of economic development. Meanwhile in Japan, despite the municipalities has the right to issue bonds. However, it is likely difficult for many municipalities, such as Sado, to return the principal and interests, at least in a short term based on the current status of their local financial revenue. Hence, in the context of both China and Japan, issuing bonds for financing BI should be linked to the development of the local economy and industry which would consequently strengthen the local public finance.

3.6. Conclusions

Whether BI is affordable is a key question to discuss the feasibility of implementing it in a given context. This chapter estimated the cost of implementing BI in the rural context of China and Japan, taking rural Ganzhou and Sado as two case study areas. Taking the corresponding policy replacement and adjustment on the

taxation in the case study areas into the calculation, the cost of implementing BI in rural Ganzhou was estimated at from 8,475,904,401 RMB (equivalent to 1.20 billion USD) to 11,115,130,761 RMB (equivalent to about 1.57 billion USD). Meanwhile, the cost of implementing BI in Sado was estimated at from 24,845,393,630 JPY (equivalent to about 231.0 million USD) to 31,574,345,630 JPY (equivalent to about 294.4 million USD). The estimated BI cost in different scenarios is not a small portion of money compared with the total financial revenue of the government. Thus, the cost of BI in the two case study areas is argued not able to be covered anymore merely based on the financial capability of their governments, provided that the rest of the financial expenditure of the government remains the same. Accordingly, it is reasonable to propose that the government at the superior level in China and Japan should offer funding to cover the budget gap on the implementation of BI in the two case study areas respectively. Another approach to finance BI is through bonds issuing. However, applying this approach should be linked with the development of the local economy and industries for strengthening the public finance to eventually repay the principal and debts.

The limitation of the study is that the cost estimation is only conducted in one case study area each in China and Japan respectively. Discussion on what the specific criteria on defining a rural area facing “the worst situation” would be, and how many rural areas in total are “worst enough” to be qualified for the implementation of BI either in China or Japan is out of the research boundary of this study. Correspondingly, the estimation of BI cost in the rural context at the national level should take these points into consideration in future studies.

Chapter 4. INVESTIGATION ON THE LOCAL PUBLIC ATTITUDE TOWARD BASIC INCOME (BI) IN THE RURAL CONTEXT OF JAPAN

4.1. Introduction

Basic income (BI) is defined as a periodic cash payment unconditionally delivered to all on an individual basis, without means-testing or work requirements (Van Parijs 2004). While different proposals for BI have been constantly made in political debates on welfare reform in western countries including, for example, the United Kingdom (Jordan 2012), Germany (Opielka 2008), Finland (Koistinen and Perkio 2014) and Spain (Perkio 2013) since the 1980s, none of them has become a nationwide policy. Nevertheless, empirical cases of so-called BI have occasionally been implemented in some countries since the 1960s, but all of them were either pilot projects or experiments lasting merely several years, or policy programs with similarities to the definition of BI.

Under the policy implementation process in any democratic governance system, whether BI can be realized first depends on the extent of public support for a proposed BI. Concern over this key point has emerged in the resurgent movement in recent years to promote BI in some countries. For example, one of the latest attempts was in Switzerland, where a national referendum was held in 2016 on whether a nationwide BI of a monthly income of 2,500 Swiss francs for every adult should be implemented, but it was rejected by 77 percent of all voters (2,466,188 valid voters (Federal Chancellery of Switzerland 2020)). BI has also been proposed by Andrew Yang, one of the presidential candidates of the Democratic Party, as part of his campaign goals for the 2020 presidential nomination in the United States, suggesting evidence for the popularity of BI in the US.

In this study, “public attitude” specifically means the aggregation of individual attitudes, either positive or negative, toward the implementation of a certain policy in society in a given context. Theories can be borrowed from different disciplines to explain how people decide whether they support BI. For example, in the field of public policy, individuals are commonly assumed as utility-maximizing agents (Wu and Chou 2017) in the self-interest hypothesis and their decision on whether to support a given public policy, such as welfare redistribution, is likely to be shaped by their concerns about how they could benefit (Linos and West 2003). Meanwhile, Svallfors (2012) pointed out that self-interest alone does not determine one’s attitude toward public policy, as individual preferences are also driven by political beliefs and one’s own ideology (Yang and Barrett 2006). Furthermore, the innovation diffusion theory (Rogers 2010) emphasizing the importance of differentiating the adopters when promoting innovation also provides a theoretical basis for investigating how individuals perceive BI if it is seen as a potential approach toward social innovation in a given context, for example, in underpopulated areas.

A limited number of empirical studies have touched upon the topic of who supports BI and what factors influence attitudes toward it. Through a comparison of the results of the 2016 European Social Survey, Lee (2018) examined the relationship between public attitudes toward BI and country-level social-economic conditions in 21 European countries, and found that countries with relatively weak social welfare systems are likely to be more positive toward BI. Andersson and Kangas (2002) investigated public attitudes toward BI from an individual perspective in the Scandinavian context by conducting a phone survey of 1,000 people aged between 15 and 80 years old in Finland and 1,000 people above 16 years old in Sweden. They found that factors such as labor

market status, party affiliation, age, and income level affected the respondents' attitudes toward BI. Bay and Pedersen (2006) found that a negative attitude toward immigration would result in a significant position change of those who support BI initially, according to the results of a telephone survey on the attitudes of 1,000 respondents in Norway.

Gaps remain in previous studies on this topic. The first one is that studies on public attitudes toward BI have been general, with survey respondents given few details on how BI should be implemented. BI would be accompanied by rearrangement of existing welfare policies and their associated bureaucracies would be either disbanded or combined (Birnbaum 2011). Which existing policies should be adjusted would vary with the context. However, such trade-off selection between BI and existing welfare policies was not considered in the methodologies of previous studies. The second gap concerns the context limitation. Previous studies commonly assume that BI is an alternative to the welfare state and ignore the concept that BI would have diverse impacts on human society from social, economic, and policy-and-governance perspectives. Expectations on what BI might achieve may vary by community, area, and country, and might contribute to shaping diverse public attitudes toward BI in different contexts. Therefore, instead of asking general questions like "do you think BI is a good idea or not," survey respondents should be clearly told the potential impacts of BI on individuals and society in a given context, and why BI is needed.

Without being given enough accurate information, it is difficult for the public to understand the merits and demerits of BI, especially in a country or area where people are not familiar with the concept, and thus their attitudes toward BI may be biased, failing to generate enough convincing evidence for the political debate on whether BI should be implemented in a given context.

In order to address such research gaps, this study investigated what factors influence public attitudes toward BI in a given context by fully considering its economic, social, cultural and political features, and then providing the public with accurate information about the proposed BI. The Hokuriku region in Japan is used for the case study of this research. Following the hypothesis, a questionnaire was carefully developed and conducted online among 1,028 local residents above 15 years old from the Hokuriku region, Japan in August 2019. Quantitative methods including cross-tabulation and the chi-squared test were used for data analysis.

The rest of the chapter is structured as follows. The next section explains how the hypothesis was developed, measures for the variables, and the method of collecting data. The third section presents findings and discusses the data analysis of the questionnaire results. The fourth section further tries to discuss the feasibility of BI scenarios for the case of Sado proposed in Chapter 3, based on the findings of the factors on influencing the public attitude toward BI in this chapter. The last section draws some conclusions.

4.2. Materials and Methods

4.2.1. Hypothetical framework, variables, and questionnaire design

What factors influence public attitudes toward BI is hypothesized based on the theories used in previous studies on similar topics, including public attitudes toward public policies such as welfare reform, social security, and distributive policies. Self-interest was often noted in the previous studies mentioned above. According to this theory, the beneficiaries of a policy typically support its implementation (Wu and Chou 2017). BI would occur together with reforms of existing welfare policies. Therefore, the first hypothesis is that people's attitudes toward BI are likely to be determined by their

concerns about the gains and losses from the tradeoff between BI and the existing welfare system.

Factors were designed based on the consideration of the theoretical impacts of BI on human society and the features of the Japanese context. Age and income are hypothesized to influence people's attitudes toward BI. This policy is argued theoretically to contribute to improving people's quality of life (Sircar and Friedman 2018). It is also considered as a strategy to address the poverty issues (Clark and Kavanagh 1996; Davies and Bregman 2017) by providing people a stable income source. Therefore, the livelihood of vulnerable people, such as elders or younger people with low-income level, would possibly be improved by BI. On the other hand, the replacement of pension by BI may also lead many elders to be reluctant to support BI.

In terms of family structure, the marital status and the presence of children are also likely to affect one's attitudes toward BI. This policy may be attractive to people who married and with children to take care of in the households as it is supposed to release the economic burden of these people from their household living expenditure. Due to the same reason, people with household members who need long-term nursing would also likely support BI.

It is hypothesized that people's attitudes toward BI are linked to their employment status. As identified in Chapter 2, a theoretical impact of BI is argued to enhance the bargaining power of laborers (Jackson 1999; Wright 2004). Thus, those who are not permanently employed are likely to benefit from BI by becoming more capable of choosing their desired work without worrying about losing income sources (Widerquist 2001).

Personal interest in participating in non-market activities is included as a factor to be investigated. Such activities in this study are defined as those, such as personal hobbies (Jackson 2017) or volunteer activities (Zelleke 2011), through which it is usually difficult to generate enough income. In the theoretical debate, it is often claimed that BI could enhance the engagement of non-market activities (Opielka 2008; Birnbaum 2011) by reshaping the meaning of work by decoupling the work ethos from productivism (Birnbaum 2011; Maskivker 2010). Hence, a person having an interest in doing non-market activities are likely to have a positive attitude toward BI.

Another critical hypothesis is that individual value is likely the other domain that affects people's attitudes toward BI. Previous studies investigating public attitudes toward BI or public policies in the European or American context often utilized political ideology (Yang and Barrett 2006; Bay and Pedersen 2006; Hasenfeld and Rafferty 1989) or party preference (Andersson and Kangas 2002; Cook and Barrett 1988; Kangas 1995) as a key factor to measure individual value. However, the above factors are considered not applicable to our study. Different from the contexts of previous studies, BI is a relatively new concept in Japan. It has neither been mentioned in the manifesto of any party across the Japanese political spectrum nor deeply discussed in any political debate. Furthermore, the impact of political ideology on determining the policy preference of voters in Japan is limited, especially when it comes to welfare-related policies. For example, Ida (2000) identified that people with either conservative or egalitarian ideologies commonly expected a big government to provide more welfare benefits.

A factor directly measuring the individual perception of a society with BI is thus included in this research. Based on the unconditionality (Pettit 2008; Lovett 2009) and universality (Baker 1992; De Wispelaere and Stirton 2007) of BI, such a society is

considered as one where everyone can survive without being forced to work. It is hypothesized the perception on the future vision of society with BI may vary among individuals, and such differences in value might affect their attitudes toward BI. It is likely that a person who accepts such a future vision of society would support BI.

The questionnaire was designed based on the above hypothesis. The first question was intended to determine people's attitudes toward BI by asking "do you agree with BI?" As most people in the survey area are probably not familiar with the concept of BI, the questionnaire started by explaining what BI is and the purpose of discussing its implementation in the Hokuriku region. The proposal was also clearly described in detail, including the amount of BI for adults and minors, as well as the policies it would replace. In the proposal, the amount is designed 100,000 yen/ month for each adult while 25,000 yen/ month for each minor. Policies replaced by BI are considered to include public pension, public assistance, nursery allowance, child-rearing allowance, medical expense subsidy system for the child, employment insurance, and exemption for individual income tax as well resident tax. Second, various questions on demographic factors including age, gender, individual income level, employment status, and family structure were designed in the questionnaire. In particular, four types of employment status were listed: permanent employment; non-permanent employment; agriculture, self-employment, and freelance; and housewife (husband), student and unemployed. In terms of family structure, respondents' marital status, whether they have children to take care of, and whether any household member needs long-term nursing were investigated in the questionnaire. Third, to measure individual values mentioned in the hypothesis, the questionnaire asked whether it would be acceptable that everyone in society can receive a cash payment that is just sufficient for living at a minimum standard even without being

forced to work. Other questions were designed to obtain supplementary information to support the testing of our hypothesis. For example, relevant to our hypothesis on people's attitudes toward BI determined by their employment status, a series of questions were asked to measure people's satisfaction with their current work-life balance, and whether they think BI would improve it. All such questions are explained in the results and discussion part of this chapter.

4.3. Data collection and analysis

The questionnaire was conducted online in the Hokuriku region in Japan in August 2019. This region is located in the northwestern part of the main island of Japan and it contains Ishikawa Prefecture, Fukui Prefecture, Toyama Prefecture, and Niigata Prefecture. The total population of the Hokuriku region is 5,311,340 people in 2015 (Statistics Bureau of Japan, 2015). The respondents were randomly selected among those living in the four prefectures and registered in the database of the survey company. The sample size was 1,028 in total. Quantitative approaches including cross-tabulation analysis and chi-squared test were used in the data analysis to identify the relationship between public attitudes toward BI and the hypothesized factors. Secondary data and other supplementary information obtained from the survey were used together to evaluate the results.

4.4. Results and discussion

4.4.1. Age and income

The results first revealed that public attitudes toward BI are significantly correlated with respondents' age and income level. The P-value from the chi-squared test was 0.006. Respondents currently in their 20s with individual income of less than 2 million yen or in

their 30s with income of less than 4 million yen tended to be positive toward BI (see Figure 4-1). This is in line with the hypothesis that younger people with lower incomes are likely to support BI. It is considered that such respondents are positive toward BI possibly due to their concern that their own income is less than the average of the Hokuriku region. As shown in Figure 4-2 (a), the median annual individual income in the Hokuriku region is less than 4 million yen. Taking common laborers in the private sector as an example, Figure 4-2 (b) illustrates that the average individual income of those in their 20s is considerably lower than the median in the Hokuriku region. Meanwhile, those in their 30s are closer to the median level. This secondary data supports our findings that respondents in their 20s with income of less than 2 million yen and those in their 30s with income of less than 4 million yen supported BI.

The same result was also found among all respondents in their 40s with incomes of 2 to 4 million yen. 59 percent of the respondents categorized in this group tended to agree with BI (see Figure 1). This positive attitude may be because their income is less than the average of those aged 40 to 49 years old (see Figure 4-2 (b)). Many of them earned even less than the median level in this region (see Figure 4-2 (a)). In fact, the result shows that 88 percent of the respondents in their 40s with individual incomes of 2 to 4 million yen are not household dependents; rather, these respondents are likely to be the head of their household, and supposed to make enough money to support the lives of the whole household. Hence, such economic pressure would be likely to make these respondents in their 40s with incomes of 2 to 4 million yen strongly interested in supporting BI.

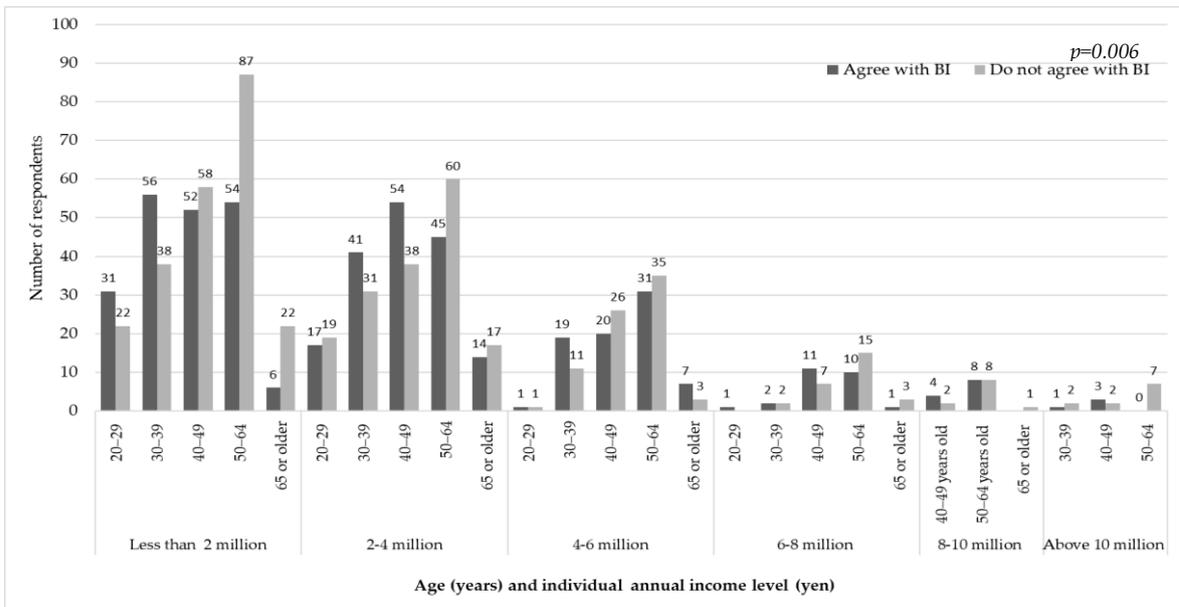


Figure 4-1 Attitudes of respondents within different income levels and age groups toward BI (N = 1006).

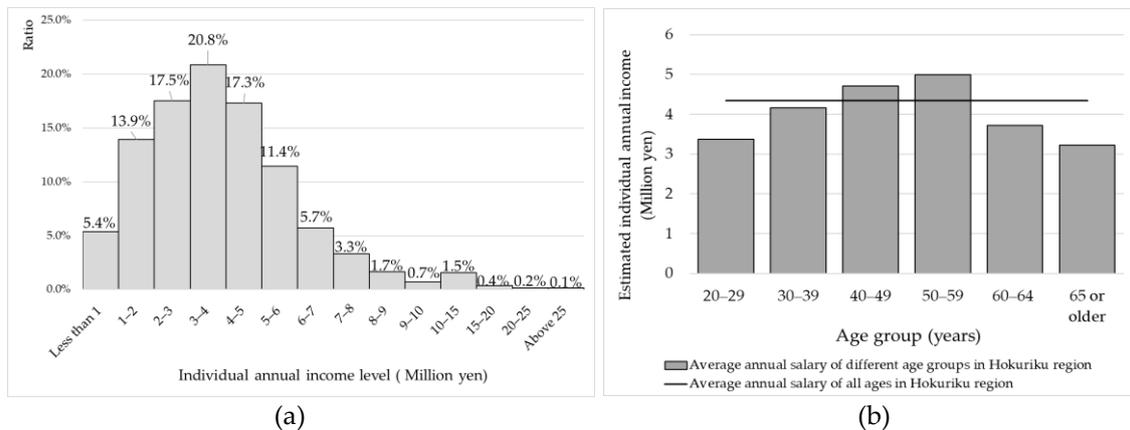


Figure 4-2 Distribution of income levels of people working continuously throughout the year (a) and estimated average income level among different age groups of common laborers (b) in the Hokuriku region, Japan

Data for (a) is from the Japan Statistical Survey of Actual Status for Salary in the Private Sector 2017 (National Tax Agency of Japan 2017) and for (b) is from the Japan Basic Survey on Wage Structure 2018 (Japan Ministry of Health, Labor and Welfare 2018).

Furthermore, regarding those in their 30s with incomes of 4 to 6 million yen, it is found that more respondents support BI than those who did not. One possible reason may be their anxiety about life in the future. The collapse of the economic bubble and the decades-long stagnation of the Japanese economy since the 1990s has caused people's

incomes to decline for decades. As shown in Figure 3, the expected individual lifelong income of both males and females between 2002 to 2011, during which the generation currently in their 30s generally started their careers after graduating from college, was found to be greatly lower than that before 2002. Meanwhile, real wages have steadily fallen since 1996 (see Figure 3), implying that wage increases have not kept pace with price increases for most of the past two decades. Therefore, being able to receive BI would help secure the future of such people.

The respondents aged 40 to 49 years old or 50 to 59 years old whose individual incomes were less than 2 million yen tended to oppose BI. According to our results, 52 percent of the respondents from these groups answered that they are dependents in their household. In Japan, dependents who rely on the head of the household enjoy various benefits, of which the main one is tax relief.

Finally, it is found that respondents above 50 years old are generally negative toward BI. This tendency is especially strong among those aged 50 to 64 years old, regardless of their individual annual income level. The same as the situation in the whole of Japan, individual incomes in the Hokuriku region usually peak in their 50s (see Figure 4-2 (b)). Hence, those in their 50s may be less interested in BI than the younger generation. Similarly, the respondents aged 65 or above were also generally negative toward BI, most likely because they are the current beneficiaries of the existing pension system. The questionnaire explained that the existing pension system would be replaced by BI, which was set at 100 thousand yen per month if implemented. According to data from the Ministry of Health, Labor and Wealth (Japan Ministry of Health, Labor and Welfare 2017), the average monthly pension in the Hokuriku region was 131,996 to 138,295 yen in 2017, which is slightly higher than the proposed amount of BI in the questionnaire,

suggesting that the incomes of many respondents would likely reduce if BI was implemented. Besides, the amount of pension is not fixed but fluctuates every year based on pension fund revenue. Hence, as it is not clear by how much the amount of pension would change in future, the respondents aged 65 or above, faced with the trade-off between pension and BI, would prefer the former to the latter.



Figure 4-3 Trend of estimated lifelong salary in Japan (Common laborers, aged 22 to 60 years old, excl. retirement allowance) and trend of real wages in Japan

Data is from Useful Labor Statistics 2018 (*Yusufuru roudou toukei* 2018) (The Japan Institute for Labor Policy and Training 2018) and Japan Monthly Labor Survey 2017 (Japan Ministry of Health Labor and Welfare 2017).

4.4.2. Family structure

Our data demonstrate that respondents from some types of family structure tend to have positive attitudes toward BI. The first type is those who are unmarried and do not have children to take care of in their households, and the second type is those who are married and have children to take care of. As shown in Figure 4-4, the ratio of respondents who agreed with BI is above 50 percent in the married group with children to take care of, and in the unmarried group without children to take care of. This finding

reflects the differences in living expenditure among different types of households in Japan. As shown in Figure 4-5, the average monthly living expenditure of single persons is higher than the average amount per member in other types of households. Furthermore, compared with married couples without any children, married couples with at least one child have a higher total living expenditure (see Figure 4-5). For these households, children's education is a major expense. Therefore, it is considered that respondents who are single without children or married with children support BI because they are concerned about the living expenditure of their own households.

A further novel finding is the stronger positive attitude toward BI among male respondents than female respondents of the same type. As shown in Figure 4-4, while the number of male respondents who agree with BI and those who do not were 91 and 77 respectively, these two numbers were almost the same among female respondents of the same type. The main reason is that in Japanese society, males are usually responsible for earning enough income through work to raise a family. Consequently, male married respondents with children are more likely to be positive toward BI than female respondents categorized in the same group.

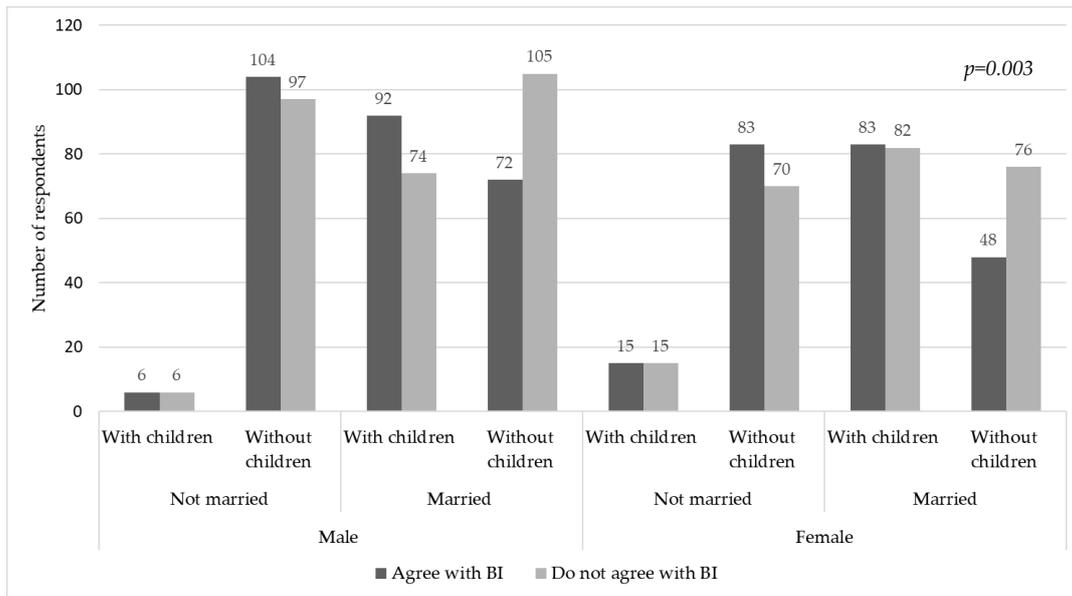


Figure 4-4 Respondents' attitudes toward BI by marital status and presence of children

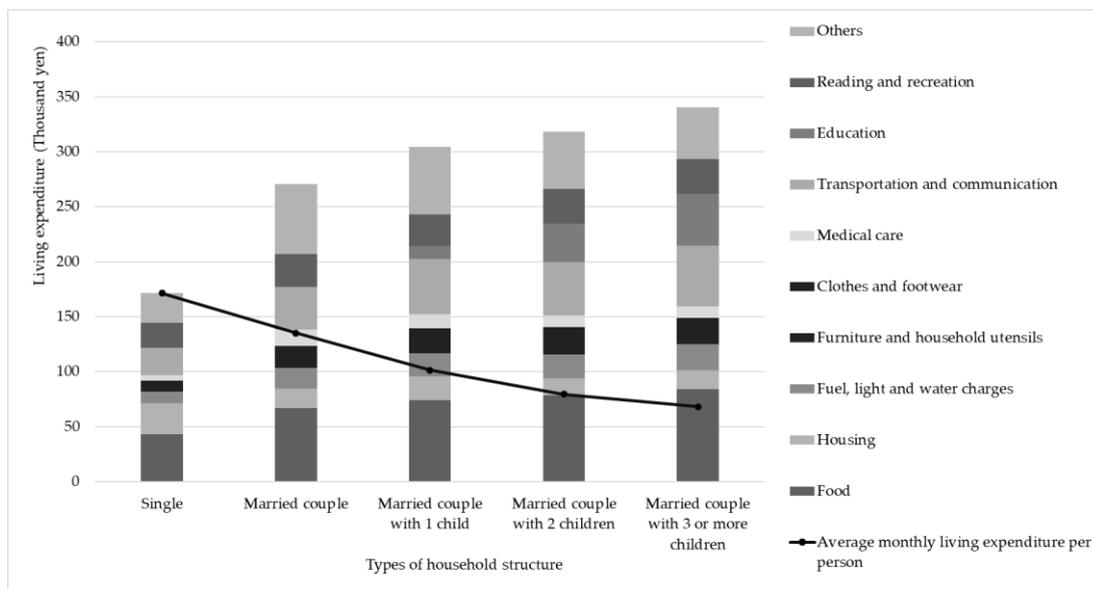


Figure 4-5 Comparison of household expenditure by type of household (Single households, Nuclear family without children, with 1 child, 2 children, 3 or more children nuclear family)

Data are from the Japan National Survey of Family Income and Expenditure 2014 (Statistic Bureau of Japan 2014).

The result demonstrated that respondents who have any household member(s) needing long-term nursing seem more positive toward BI than those who do not (see Figure 4-6).

This result is consistent with the current status of revenue and expenditure between households with and without any member(s) requiring long-term nursing. Figure 4-7 highlights that in Japan the average household income per month of households with member(s) requiring long-term nursing is estimated to be 40,000 yen less than those without such member(s). In addition, long-term nursing also leads to an increase of household expenditure in daily life. It is argued that the economic burden may increase interest in BI among respondents with household members requiring long-term nursing.

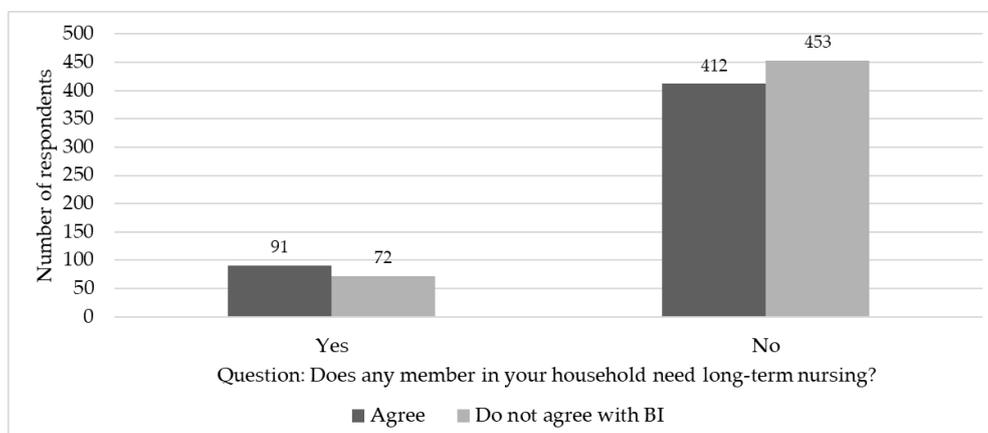


Figure 4-6 Respondents' attitudes toward BI (by whether respondent households have any members who need long-term nursing) (N = 1028)

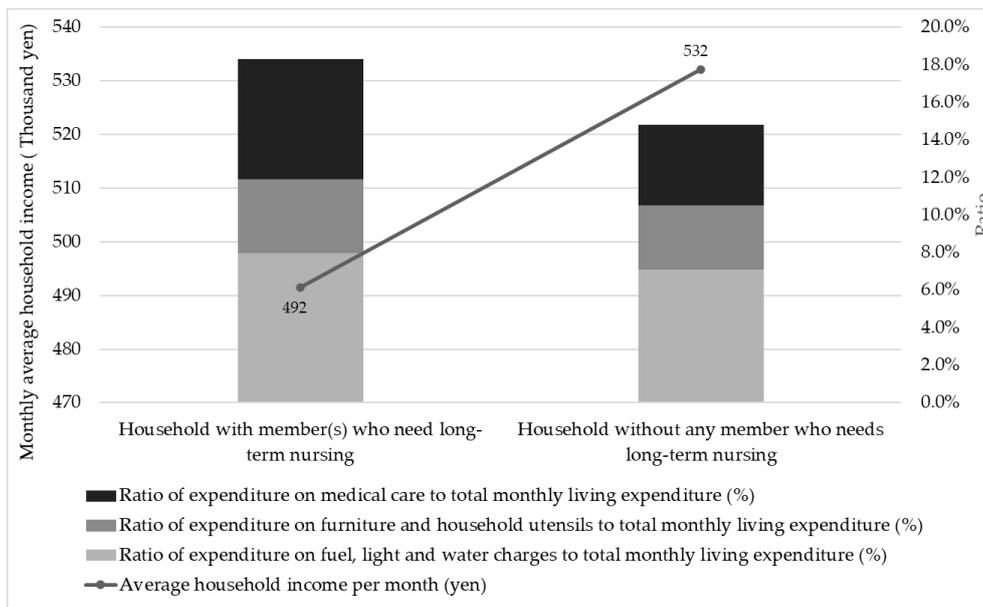


Figure 4-7 Comparison of expenditure of households with and without members who need long-term nursing

Data are from the Japan National Survey of Family Income and Expenditure 2014 (Statistic Bureau of Japan 2014).

4.4.3. Interest in participating in non-market activities

In line with our hypothesis, the results in Figure 4-8 below clearly show that respondents who are interested in participating in non-market activities tend to be more positive toward BI than those who are not.

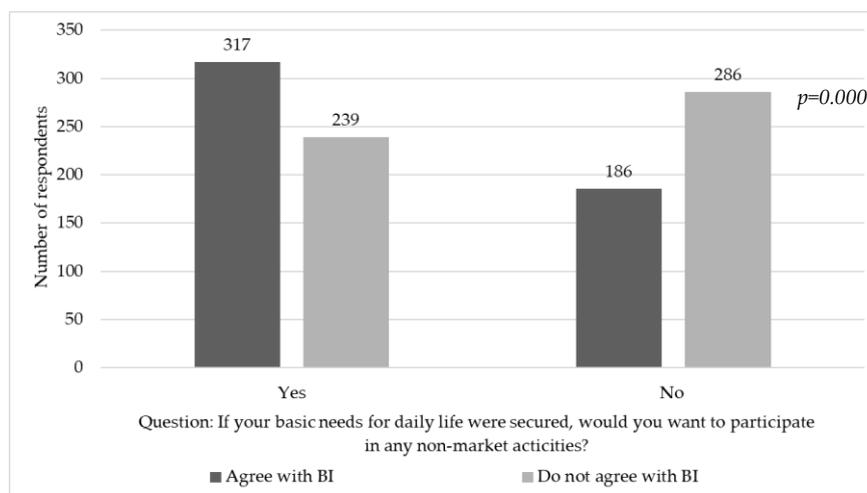


Figure 4-8 Attitudes toward BI between respondents who are interested in participating in non-market activities and those who are not (N = 1028)

The results also reveal that the positive attitudes of respondents who are interested in non-market activities are consistent with their perception that BI may ease the social conditions for participating in such activities. The questionnaire asked whether a society with BI would make it easier for people to spend time on non-market activities (such as personal hobbies, volunteer activities, etc.) which usually do not generate income. As shown in Figure 4-9, nearly 51 percent of the respondents who are interested in non-market activities in all age groups answered that they think such change might occur. In particular, those under 40 years old tended to give more positive answers to this question than older people. Among all respondents who are interested in non-market activities in all ages, the ratio of those agreeing that BI would ease social conditions for participating in non-market activities was 69.1 percent for those under 30 years old, and 55 percent for those aged 30 to 40 (see Figure 4-9). The ratio was slightly less than the average for those aged 50 to 65 (see Figure 4-9).

Engaging in non-market activities can be understood as one way of achieving human needs at a higher level, including love and belonging, esteem and self-actualization defined in Maslow's theory of needs. However, such human needs cannot be achieved without fulfilling physiological and safety needs first. That is, one must ensure a stable income source for one's own livelihood as a precondition to pursuing human needs at a higher level. In Japan, according to the Public Assistance Law, it is difficult for people whose income is below the minimum level to receive public assistance unless they do not first try to find paid work. Entitlement to social benefits such as pension and unemployment insurance is also strongly tied to paid work.

It is anticipated that BI enhances engagement in non-market activities by decoupling the relation between market-led productivity and entitlement to income (Opielka 2008).

To enhance the equality of society, self-realization by exercising one’s own skills should be, at least partially, independent from others’ judgment on what is valuable in society (Maskivker 2010). Our results suggest that, as BI is expected to help reshape the purpose of work, it is attractive for respondents who are interested in non-market activities, and so they have a reason to support BI.

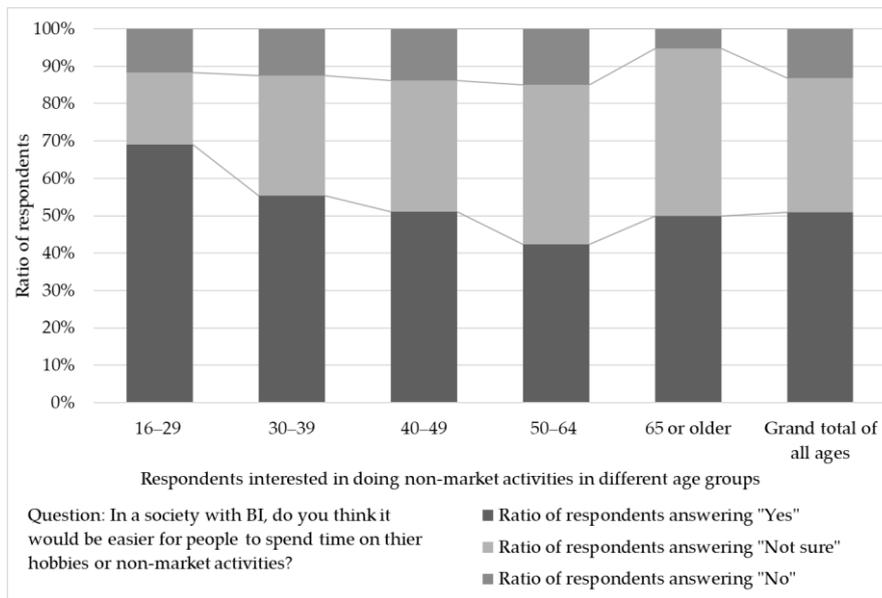


Figure 4-9 Answers of respondents who are interested in non-market activities by age group on whether BI in society would make it easier for people to spend time on their hobbies or such activities (N = 556).

4.4.4. Employment status

The results demonstrated that attitudes toward BI also differ by employment status, even though the p-value from the chi-squared test was not significant. As shown in Figure 4-10, the attitudes of respondents in permanent employment tended to be more positive toward BI than those with other employment statuses. This is not in line with our hypothesis that people with non-permanent work are likely to be more positive toward BI.

The result is considered related to the satisfaction of respondents of different employment statuses with their current work-life balance. As illustrated in Figure 4-11,

respondents in permanent employment tend to be more dissatisfied in general with the time taken for each daily activity than the average level among all respondents. Especially, the ratio of their dissatisfaction with the daily time spent on work, interests and hobbies, communication and child-raising is higher than for all other types of employment status.

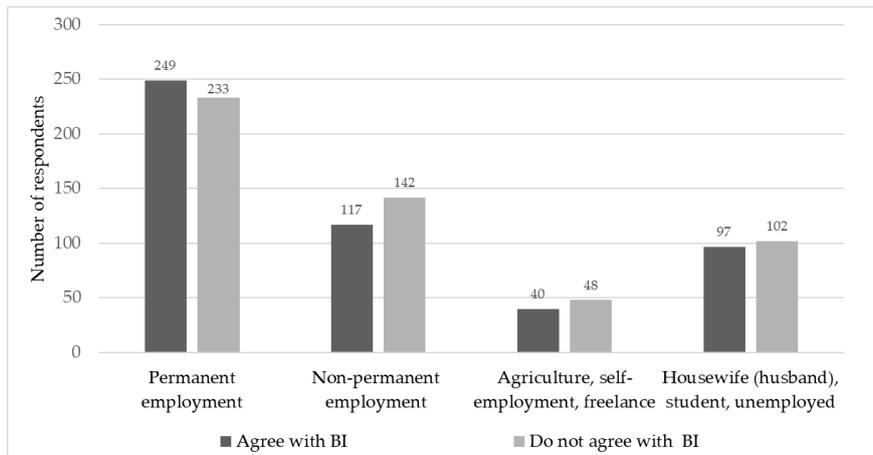


Figure 4-10 Attitudes toward BI of respondents with different employment status and the ratio of respondents who think that BI would improve their current work-life balance to all in each employment status (N = 1028)

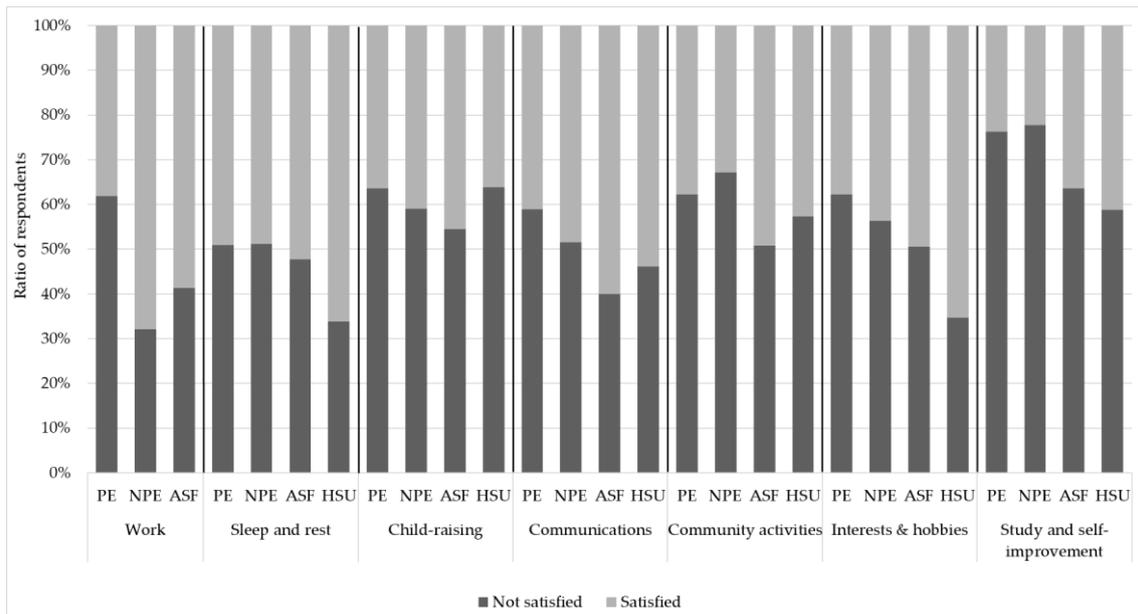


Figure 4-11 Satisfaction of respondents with different employment status¹

In Japan, permanent jobs usually have fixed working hours, which are less flexible compared with other employment statuses such as non-permanent employment or self-employment. A previous study on time use of employees in the private sector in Japan conducted by the Japan Trade Union Confederation in 2015 supports our argument, reporting that the average daily working time in Japan is 8.9 hours for a permanent employee but 6.4 hours for a non-permanent employee (Japan Trade Union Confederation 2015). Furthermore, the total hours of unpaid overtime are 20.1 hours per month for permanent employees but only 9.5 hours per month for non-permanent employees.

The items listed in Figure 4-11 can be categorized into human needs at different levels defined by Maslow's hierarchy of needs (Maslow 1958): sleep and rest are physiological needs; child-raising, communication with family members or friends, and

¹ PE: permanent employment, NPE: non-permanent employment, ASF: agriculture, self-employment and freelance, HSU: housewife (husband), student and unemployed with their current use of daily time. (Respondents answering not applicable in each of the items are excluded.)

community activities belong to love and belonging needs; interests and hobbies, and study and self-improvement are relevant to esteem needs and self-actualization. Japan is a developed country with a relatively mature social security system and so it is not thought to be difficult for most people to fulfill their needs at lower levels, such as physiological and safety needs. Nevertheless, Maslow's theory claims that one's progress in fulfilling hierarchical human needs is not unidirectional due to interference by life experiences (McLeod 2018), and so the work-life imbalance faced by many respondents in permanent employment illustrated in Figure 4-11 is argued to hinder their achievement of human needs at higher levels in the hierarchy by forcing them to struggle with fulfilling human needs at lower levels, back and forth.

All these findings related to employment status indicate that permanently employed people are more willing to support BI as they expect it would improve their work-life balance.

4.4.5. Perception on the future vision of society with BI

Finally, the results demonstrate that people's vision for society with BI differs significantly among those who agree with BI and those who do not. This is in line with our hypothesis. Respondents were asked whether it would be acceptable that everyone in society can receive a cash payment that is just sufficient for living at a minimum standard even without being forced to work. Figure 4-12 (a) indicates that in the group who agree with BI, 52 percent answered that it is acceptable, and only 14 percent answered that it is not. On the contrary, in the group who do not agree with BI, 15 percent of respondents answered that it is acceptable while 37 percent answered that it is not.

A controversial objection to BI is that it may induce laziness and is not fair for hardworking people to be taken advantage of by others who are unwilling to work and just want to enjoy leisure time (Rawls 1988), and that it may cause society's productivity to decline in the long term. Putting aside the issue of laziness in this study, how respondents who currently have jobs and agree with BI would deal with their current jobs if BI was implemented was also investigated in order to assess the extent to which laziness might occur in our case study area. Surprisingly, the results showed that no matter whether they agreed with such value, most of the respondents who agree with BI would continue working. As shown in Figure 4-12 (b), among the 210 respondents who accepted that everyone could survive without working, 116 respondents would not quit their current job and would change nothing. 57 respondents answered that it would improve the conditions of their jobs, either by shortening the working hours or by requiring a salary increase or promotion. 34 respondents said they would actively change jobs to one which is more suitable for their self-actualization. Only two respondents decided that they would be lazy, quitting their job, and doing nothing. This result implies that BI would not, at least in its initial phase, cause large-scale laziness in the Hokuriku region.

Although different individuals will have different reasons, the main reason for this result is considered that the spirit of working hard is a key social norm in Japanese society. In Japan, working is stated in the constitution as one of the basic duties of each citizen. There is also a Japanese proverb that "he who does not work shall not eat." Such cultural attitude to work is deeply rooted in the mindset of Japanese people and may make them cautious about choosing not to work in a society with BI.

It was also found that the incomes of most respondents who answered that they agree with such value but do not agree with BI, are below or close to the median income level of the Hokuriku region. Especially, 58 percent of these respondents have annual incomes of less than 2 million yen. It is considered that the expected loss of current benefits upon replacement of the existing policy with BI makes these respondents reluctant to support BI.

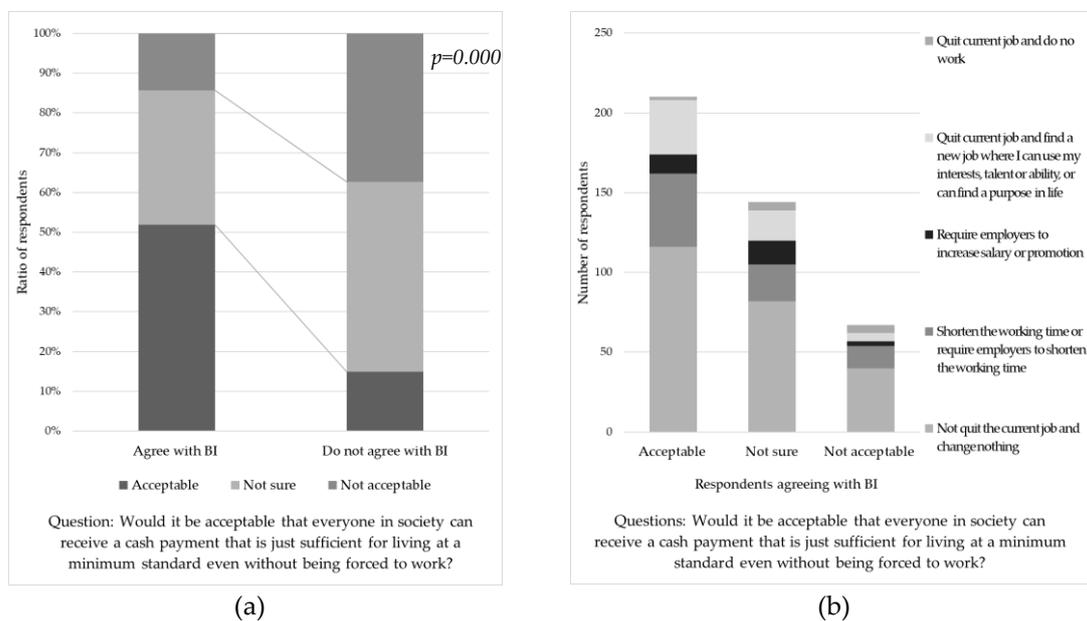


Figure 4-12 Perception of all respondents on the future vision of society with BI and their attitudes toward BI (N = 1028) (a). The perception of all respondents agreeing with BI on the future vision of society with BI and their ideas on how to deal with their current jobs in a society with BI (housewife (husband), students, and unemployed excluded, N = 852) (b).

4.5. Discussion of feasibility of BI scenarios in Sado based on the cost calculation and public attitude

Despite that the universality and unconditionality of BI that an original approach following the definition of BI is to give everyone BI, whether BI is feasibly implemented should be considered the reality. It is linked not only to the cost from the perspective of

public finance but also to its social applicability—who will likely support the policy in society.

Aiming to enhance the achievement of this study on the objective 1 and objective 2, this section further tries to comprehensively discuss the feasibility of BI in the rural context, based on the result of the calculation on the cost of BI in Chapter 3, and the result about the factors influencing the public attitudes toward BI in this chapter. Due to the differences in the methodology design between the case studies in China and Japan, this chapter only selected Sado in Japan as the case for further discussion.

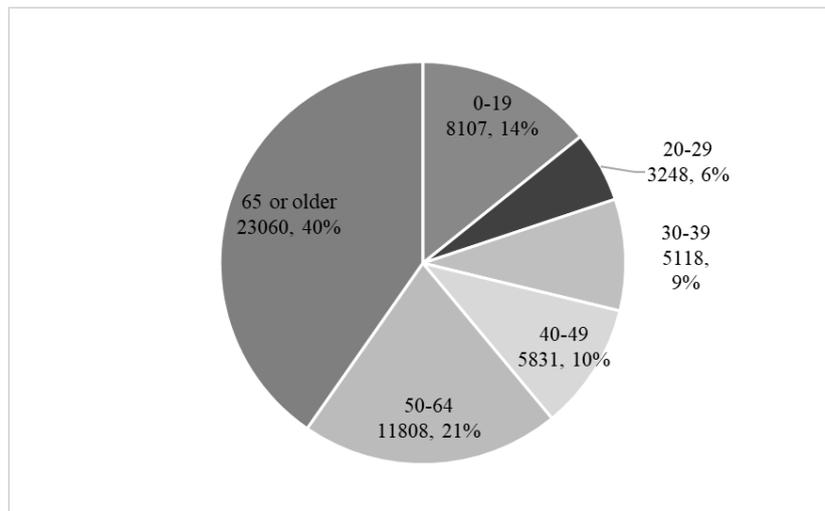


Figure 4-13 Population and ratio of the residents in Sado at different age groups (years old)

Made by the author based on the data from National Census 2015

4.5.1. Age and income

In terms of age, as the result of the survey in Chapter demonstrated that people at the elder age especially from 50 to 64 years old or above 65 years old tend to be more negative towards the BI. The population composition in Sado is typically an example representing aging and depopulation society in Japan. As shown in Figure 4-13, the residents above 50 years old in Sado occupies 61% of the total local population. This

implies that among the three BI proposals mentioned in Chapter 3, it would be more difficult for Scenario 1 (SS1) and Scenario 2 (SS2), in which all the adult residents will receive BI, to receive support from elders in a context such as Sado featured with aging society and depopulation. In the meantime, it is identified in the survey that younger people, especially those in the 20s and 30s with low-income levels are supposed to be in favor of BI. However, as the population of the younger generation (e.g. those in the 20s, 30s or 40s) in an aging context such as Sado, is much less than elder generation (e.g. those in 50s or elder), the potential number of BI supporters from this group is supposed to be limited.

4.5.2. Family structure

The result from the survey shows those who are married and with children whose livelihood are depending on the households tend to be in favor of BI due to the concerns on the total living household expenditure. Therefore, principally they are supposed to more support on SS1 than other scenarios. In the case of Sado, out of the 22,352 households in Sado, there are 6,401 households including but not limited to a married couple and children (See Figure 4-14). However, within such households mentioned above, there are 3,054 households in which even the youngest child is above 18 years old (National Census 2015), which implies that the children from these households above possibly do not need to depend on their households. Therefore, their parents are likely less able to be categorized as BI supporters following the findings from the survey, compared with those from the rest of the 3,347 households.

Local residents from single households may support all of the three scenarios (SS1, SS2, and SS3) as the result of the survey suggested. However, the number is

considered limited. Despite the ratio of single households reached 30% of the total number of households in Sado (See Figure 4-14), it is reported that there are 3,848 single households above 65 years old, and this number is even higher if those between 50 to 65 years old are included. As elder people are identified more against on BI in the survey, it is implied that both supporters and opponents are mixed in more than 57.1% of the single households in Sado.

Following the result from the survey, respondents with household member(s) who needs long-term nursing tend to be more in favor of BI. Following the categorization of the National Census (2015), the supporters are possibly from those include but are not limited to a married couple with parent(s). The local residents from such households would likely support on SS1 and SS2. In Sado, there are in total 3,507 households following this type, which merely occupy 16% of the total number of households. Therefore, the number of supporters from the households mentioned above is possibly limited.

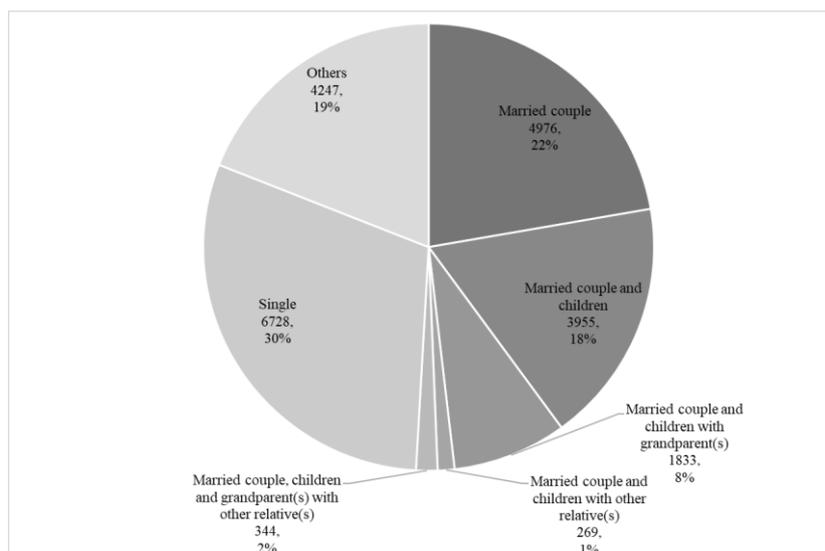


Figure 4-14 Ratio of different types of households in Sado City

Made by the author based on the data from National Census 2015 (Statistic Bureau of Japan 2015)

4.5.3. Employment status

As the result of the survey suggested that permanently employed respondents tend to be more favor of BI, compared with other types of employment status. According to the National Census (2015), the total population above 15 years old is 51,186 people in Sado. As shown in Figure 4-15, permanent employment is the primary employment status as the number of permanently employed workers is 13,557 people and it occupies 26.5% of the total population above 15 years old. Due to the limitation of data, it is unsure about the demographic structure of the population with varied employment status in Sado. Nevertheless, data for the entire Niigata Prefecture may provide some evidence on the situation of the population with varied employment status in different age groups. In Niigata Prefecture, among all the permanently employed workers, the ratio of those above 55 years old is merely 18.3%. On the other hand, this ratio is 72.0% and 36.4% when it comes to self-employment and non-permanent employment (See Figure 4-16). This implies that currently in Sado younger people tend to have permanent jobs while elder people tend to be more involved in others such as self-employed jobs or non-permanent jobs. Therefore, adult residents who are permanently employed in the case of Sado are possibly to support all of the three scenarios (SS1, SS2, and SS3) rarely without the interference of the impact from age.

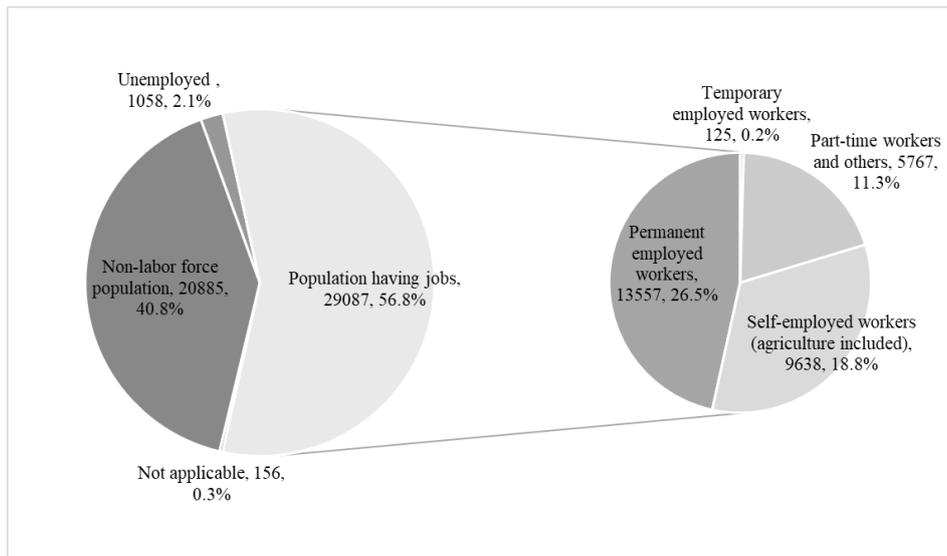


Figure 4-15 Number and ratio of the population having jobs with different employment status in Sado

Made by the author based on the data from National Census 2015 (Statistic Bureau of Japan 2015)

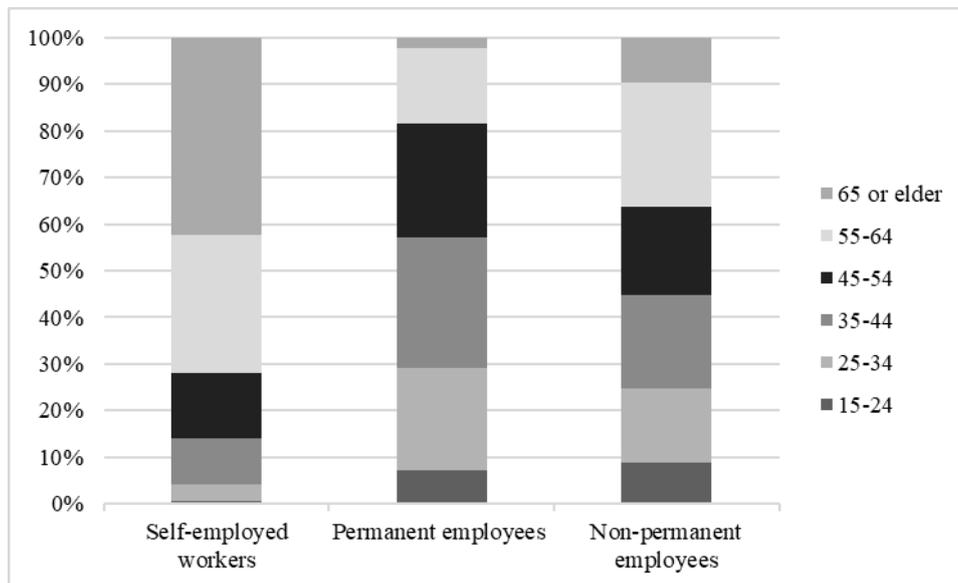


Figure 4-16 Ratio of the population having jobs with different employment status in Niigata Prefecture by different age groups (years)

Made by the author based on the data from Employment Status Survey (2012) (Statistic Bureau of Japan 2012)

4.5.4. Comparison of the feasibility of BI scenarios in Sado

Compared with SS3, potential supporters on SS1 or SS2 are argued to consist of more diverse types of local residents. However, apart from those between 20 to 64 years with permanent employees, the number of other potential supporters from, for example, those younger generations in the 20s or 30s with low-income level, those parents with the youngest children is under 18 years old or those living together with elder parents is argued limited. In the meantime, many of the elder people above the 50s which is a major group of population in Sado may play the role of an opponent on SS1 and SS2. Following the result of cost calculation in Chapter 3, among three BI scenarios, the cost of SS1 is estimated the highest one, while the cost of SS3 is estimated the lowest one. Therefore, SS3 is argued to be more feasible to be implemented than the other two scenarios due to a comprehensive concern on the cost and public attitudes of all the three BI scenarios.

4.6. Conclusions

With the increasing interest in BI worldwide in recent years, a precise understanding of public attitudes toward implementing BI would provide valuable evidence for discussions among academics and policymakers on the feasibility of introducing BI in any given context. Taking the Hokuriku region of Japan as an example, this study investigated the factors influencing public attitudes toward BI in Japan. Through a cross-tabulation analysis and chi-squared analysis of the results of our questionnaire survey, it is concluded that public attitudes toward BI are influenced by people's own interest in the expected gains and losses from BI, as well as their perception on values related to BI. From the self-interest perspective, it is found that taking age and income

levels into consideration, people tend to base their attitude by weighing up the gains and losses in a trade-off selection between BI and the existing welfare benefits. Regarding the family structure, the results indicate that people who are either unmarried without children to take care of, or married with children to take care of in the households are more positive toward BI. BI is also found to be supported by those who have other household members who need long-term nursing. The findings confirm that attitudes toward BI are influenced by the interest in non-market activities. The expectation that BI would redefine the purpose of work, the original function of which is for survival, induces people who are interested in participating in non-market activities to support BI. The results also suggest that permanent employees tend to be in favor of BI due to dissatisfaction with their current work-life balance and the expectation that BI would improve it. Finally, in terms of individual values, our findings demonstrated that people's perception on the future vision of society created by BI influences their attitudes toward BI. Nevertheless, the results also reveal that even for respondents who accept such values and agree with BI, few would choose to be lazy by stopping doing anything. One reason is considered because of the deep-rooted working spirit among Japanese people as a key social norm.

The result from this survey implies a potential constraint to implement BI in the rural context under a democratic governance system, such as Japan, that different attitudes toward this policy may cause difficulties to pass this policy through a vote among local residents.

Finally, the findings of the factors influencing the public attitudes toward BI identified in this chapter were used in the discussion on the feasibility of BI scenarios for Sado proposed in Chapter 3. It is argued that scenario SS3 is relatively more feasible to be

implemented than the other two scenarios (SS1 and SS2), considering the public acceptance toward BI and the estimated cost of BI.

Chapter 5. UNDERSTANDING THE ATTITUDE OF LOCAL GOVERNMENT ON THE IMPLEMENTATION OF BASIC INCOME (BI) IN THE RURAL CONTEXT OF CHINA

5.1. Introduction

It is considered a common pattern for the policymaking process in China since the reform and opening-up in the 1980s that policy innovation is first triggered at the local level and then promoted to the whole nation (Zhu and Xiao 2015). Thus, if BI is perceived as a practice of policy innovation, local governments are supposed to play a significantly important role in determining its implementation in the context of China, and accordingly, their attitudes on this innovative policy which has never been practiced in China before is of necessity to be investigated. The research aim of this chapter is to understand the attitudes of local government on the implementation of BI in rural areas in the context of China. Specifically, taking Ganzhou, Jiangxi province as a case study, the objective of this chapter is to investigate how the local government at different levels in Ganzhou would perceive BI if it was under the discussion of being implemented currently and interpret the potential motivations or constraints, if any, from the perspective of local government to promote or hinder its implementation.

5.2. Governance system in China

5.2.1. Central-local government relationship

In the context of China, the Chinese governance is featured with a one-party system. As shown in Figure 5-1, a top-down connection can be perceived between the central government and local government, and within the local government at different levels.

The local-central government relationship is different from other democratic countries such as Japan. According to the constitution of China, Chapter 1, Article 3, the division of functions and powers between the central and local state organs is guided by the principle of giving full scope to the initiative and enthusiasm of the local authorities under the unified leadership of the central authorities. This implies that the local government at different levels is closely interlinked with the central government.

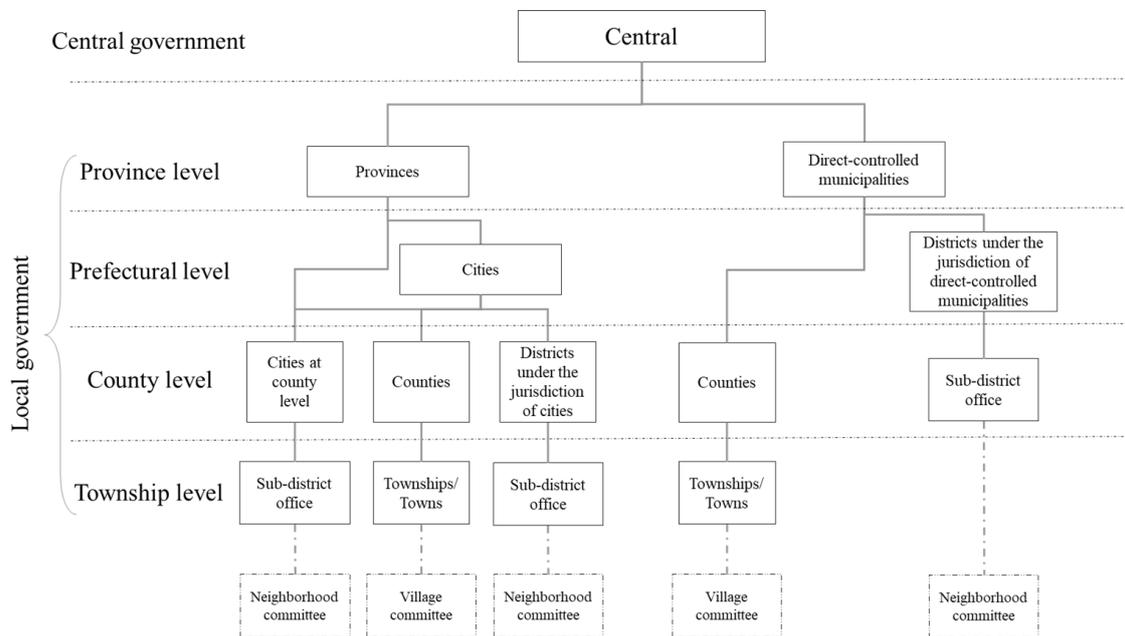


Figure 5-1 Typical structure of governance at different levels in China

The neighborhood committees or the village committees are residents' autonomy organizations that provide necessary administrative services under the guidance of the county-level government

Modified by the author based on the Ministry of Land, Infrastructure, Transport and Tourism of Japan (No date)

5.2.2. Current key top-level designed rural policies in China

Currently, the governance of local government at different levels are mainly under the guidance of two national planning designed by the central government aiming to holistically address the rural poverty issue and promote the future development of rural China. The first one is the Targeted Poverty Reduction. Target poverty reduction is

defined to make people living in poverty in rural areas have adequate food and clothing and able to access compulsory education, basic medical care, and safe housing by putting efforts on targeting the population, designing projects, using funds, implementing measures, appointing village personnel and achieving outcomes (Chapter 56, the 13th Five-year plan for the national economic and social development of the People's Republic of China). The concept of targeted poverty reduction was first raised at the central governmental level by President Xi in the Central Economic Work Conference in 2014. In 2015, the 13th Five-year plan for the national economic and social development of the People's Republic of China set a clear objective to lift all the rural population fall below China's current poverty line out poverty by 2020 through targeted poverty reduction. In Chapter 3 of the plan, the objective is claimed as follows:

“All rural residents falling below China's current poverty line will be able to lift themselves out of poverty, all poor counties will be able to rid themselves of poverty, and poverty alleviation will be achieved in all regions.” (Chinese Government, 2016c)

Since then targeted poverty reduction became a key part of the work of local government at different levels in the rural areas. In order to further strengthen the top-level design of targeted poverty reduction, the State Council of China released a comprehensive guideline on winning the battle against poverty for improving the current poverty reduction work of lower tiers of government, and the key content of this guideline is shown in Table 5-1.

The second top-level designed rural policy is the National Strategy of Rural Revitalization. The National Strategy of Rural Revitalization (2018–2022) was released by the National Council of the Chinese central government in 2018. As the first

top-level designed plan for the first five years of promoting rural revitalization in entire China, it first claimed the future vision of future rural China in 2035. Furthermore, the key objectives of the rural revitalization in China are to promote the development of industries in the rural areas, the development of rural villages with a pleasant living environment, the prosperity of rural culture, enhance the governance in the modern rural village and the security and improvement of rural livelihood. Also in this plan, in total 22 specific indicators were released in order to measure the outcomes of the rural revitalization in China at the national level until 2022 from the perspectives of the prosperity of local industry, pleasant living environment, rural civilization, effective rural governance and living in plenty. The content of all the indicators is shown in Table 5-2.

Table 5-1 Main content of the guideline on “winning the battle against poverty” released by the State Council of China in 2018

Objective of targeted poverty reduction:	
<ul style="list-style-type: none"> • Eradicate extreme poverty and entirely alleviate the regional poverty by 2020 through targeted and differentiated measures including fostering distinctive industries, advancing relocation, carrying out ecological restoration, strengthening education, and improving social security. • The increasing margin of disposable income of the rural population in poor areas should be achieved higher than the national average level. • The provision of public service in poor rural areas should be enhanced close to the national average level. 	
Key Working requirement:	
<ul style="list-style-type: none"> • The work of targeted poverty reduction should strictly follow the following standards The poor population should be guaranteed food and clothing Children from poor families should be guaranteed nine-year compulsory education Basic medical needs and living conditions of poor population should be guaranteed • Do not lower or upgrade the standards and raise any unrealistic objectives in order to avoid poverty trap and prevent from the appearance of cliff effect in the benefits received between poor population and non-poor population, and poor village and non-poor village. 	
Key points:	Explanation of key points
Concentration of the power on support the poverty reduction in the extreme poor areas	<ul style="list-style-type: none"> • Improve the conditions for development in the extreme poor areas • Focus on the issues faced by residents in the extreme poor areas • Reinforce the policy support in the extreme poor areas
Reinforce the support to each individual, each household and each village	<ul style="list-style-type: none"> • Strengthen the support on developing industry, enhancing employment, relocation, the ecological protection, education, the improvement of the provision of public health system, house renovation, social security, assistance on disability and promotion of ambition of poor population
Accelerate to improve drawbacks of infrastructure in poor areas	<ul style="list-style-type: none"> • Promote the improvement of transportation, water-related projects, the construction of electricity power and network, the renovation of living environment in rural areas
Strengthen the backup for the targeted poverty reduction	<ul style="list-style-type: none"> • Strengthen and secure the input of public finance • Enhance the financial services for the targeted poverty reduction • Strengthen the support of land policy • Implementing the plan of talent cultivation and technical investment
Promote the participation of the whole society in the targeted poverty reduction	<ul style="list-style-type: none"> • Consolidate the East-West collaboration • Enhance the responsibility and duty of all governmental sectors in the targeted poverty reduction • Ensure the duty of military in the targeted poverty reduction • Stimulate the participation of private sectors and social organizations in the targeted poverty reduction • Promote the volunteer activities for the targeted poverty reduction
Focus on the basic work in the targeted poverty reduction	<ul style="list-style-type: none"> • Enhance the information share and the accuracy of information • Finalize the mechanism to be reidentified as non-poor households • Start the national-level census on the outcomes of targeted poverty reduction
Strengthen and improve the guidance from CPC in the work of targeted poverty reduction	<ul style="list-style-type: none"> • Further ensure the responsibility of all local governmental sectors in the targeted poverty reduction • Clarify the responsibility of sectors of central government in the targeted poverty reduction • Improve the supervision and assessment mechanism • Strengthen the CCP organization in the poor areas • Cultivate cadres for the poverty reduction • Create a good atmosphere of public opinion • Prepare for preventing from the risks in targeted poverty reduction • Link the targeted poverty reduction and rural revitalization

Translated by the author based on the information from the Chinese Government (2018)

Table 5-2 Main content of National strategy of rural revitalization released by the State Council of China

Perspectives	Indicators	Baseline in 2016	Goal in 2022	Indicator type
Prosperity of the industries in rural areas	Grain productivity (Three major types of grain in China: rice, wheat and maize)	Higher than 600 million ton	Maintain the same level	Mandatory
	Contributive ratio of agricultural technology progress	56.7%	61.5%	Anticipated
	(Annual) agricultural labor productivity	Annual 31000 RMB per capita	Annual 55000 RMB per capita	Anticipated
	Proportion of value of processing of agricultural product processing on the total value of agricultural output	2.2	2.5	Anticipated
	Person-time of visitors in the agricultural and rural tourism	2.1 billion person-time per year	3.2 billion person-time per year	Anticipated
Pleasant living environment	Ratio of utilization of dung of domestic animals and poultry	60%	78%	Mandatory
	Green coverage ratio in village	20%	32%	Anticipated
	Ratio of villages disposing household garbage to all villages in China	65%	Higher than 90%	Anticipated
	Coverage rate of sanitary latrine in rural area	80.3%	Higher than 85%	Anticipated
Rural civilization	Coverage ratio of integrated cultural and service centers at the village level	-	98%	Anticipated
	Ratio of identified civilized villages and identified civilized town/ township at the county level and above levels	21.2%	50%	Anticipated
	Ratio of the teachers with bachelor or above degrees in the rural compulsory education schools	55.9%	68%	Anticipated
	Ratio of the expenditure of rural residents on education and entertainment	10.6%	13.6%	Anticipated
Effective rural governance	Coverage ratio of village planning management	-	90%	Anticipated
	Coverage ratio of villages having integrated service center	14.3%	53%	Anticipated
	Ratio of Villages whose Chinese Communist Party secretaries are with addition post of village heads	30%	50%	Anticipated
	Ratio of villages with clear village regulation and non-governmental agreement	98%	100%	Anticipated
	Ratio of villages identified to have strong collective economy	5.3%	9%	Anticipated
Living in plenty	Engel Coefficient of rural resident	32.2	29.2	Anticipated
	Urban-rural income ratio	2.72	2.67	Anticipated
	Coverage ratio of tap water supply	79%	85%	Anticipated
	Ratio of administrative villages having tarmac and cement roads	96.7%	100%	Mandatory

Translated by author based on Xinhua News Agency (2018)

The top-level designed plans for Targeted poverty reduction as well as the rural revitalization are functioning as key guidance on the work of local government at different levels in rural governance and management in China.

5.3. Methodology

5.3.1. Conceptual framework

A conceptual framework was developed to investigate the attitudes of local government in China on the implementation of BI based on the theoretical impacts of BI brought to the human society reviewed in Chapter 2 as well as the focuses of the Chinese government on the rural governance and rural policymaking. As shown in Figure 5-2, a three-domain framework including society, economy, and policy was expected to achieve the research objective.

Social domain and economic domain mainly refer to the impacts which are considered to be possibly brought to the rural society and rural economy respectively if BI was implemented from the perspective of local government in China. Policy domain refers to the consideration of government on the external ground such as whether BI is in line with the top-level strategy development from central government, or whether such policy would bring any possible risks) for implementing BI. The attitude of the local government on the implementation of BI is formed through its comprehensive consideration of both motivation and challenges in initiating this policy at the present.

Ganzhou is a municipal-level administrative division located in the Southern part of Jiangxi Province in South China (See Figure 5-3). The total population in Ganzhou is 9.6 million, in which the number of non-agricultural registered permanent residents is 2.28 million while the number of agricultural registered permanent residents is. There are in total 3 districts and 15 counties under the administrative jurisdiction of Ganzhou. In 2015, the total GDP of Ganzhou has reached 197 billion RMB. The annual income per capita in 2015 is 25,000 RMB in urban areas while 7,786 RMB in rural areas, which are both below the national average level in the same year.

5.3.3. Data collection and analysis

Quantitative approaches were applied in this study. 4 individual interviews and 3 group discussions with City government of Ganzhou and County government of Xingguo, one of the counties under the administration of Ganzhou City, were conducted respectively in September 2019. All the informants are heads of different bureaus, a member of the political consultative conference, and grassroots cadres (See Table 5-3).

Table 5-3 Information about all the conducted interviews

NO.	Type of interview	Informants
1	Individual interview	Vice office director, Office of Poverty Reduction, Ganzhou City Government
2	Individual interview	Former director, Financial Bureau, Ganzhou City Government
3	Individual interview	Section chief, Bureau of Rural Pension, Ganzhou City Government
4	Group discussion	Bureau of Civil Affairs, Ganzhou City Government
5	Group discussion	Government of Xingguo County, Ganzhou City
6	Group discussion	Financial Bureau, Ganzhou City Government
7	Individual interview	Commissary of Ganzhou municipal Chinese People's Political Consultative Conference (CPPCC), Policy advisor of Ganzhou City Government, Collage of Finance, Ganzhou Normal University

Accordingly, open-end questions for the individual interviews and group

discussions are also designed based on the proposed conceptual framework (See Figure 5-2). The key questions were elaborated in Table 5-4.

Table 5-4 Key questions asked in the interviews

Content of the questions
<ul style="list-style-type: none"> • According to what I have just explained on BI, what potential benefits* that BI can theoretically generate to the rural area would attract the interest of the Ganzhou City Government? <ul style="list-style-type: none"> * The potential benefits include, for example, the improvement on the life stability, economic independence, work-life balance, education, bargaining power in the labor market, development of the local industry with a possibly cheap salary provided to labors, etc) • How do you perceive the potential of BI to address the rural issues currently faced in rural Ganzhou, from the perspective of the Ganzhou City Government? • What issues do you think would be triggered or worsened because of the implementation of BI? • How do you compare the existing policies implemented in rural Ganzhou with BI in terms of achieving the benefit of ..., from the perspective of the Ganzhou City Government? • From the perspective of the Ganzhou City Government, in what aspects would BI be in line with the current guiding ideology and in what aspects would BI be in contrast with the current guiding ideology. • As the cost of implementing BI in the rural Ganzhou is estimated at about from 8.31 billion to 11.12 billion RMB, would it be possible for the superior government (provincial or central government) to provide funding financing the implementation of BI in rural Ganzhou? • From the perspective of government, what would be the difficulties hindering the implementation of BI in rural areas, or the advantageous to promoting the implementation of BI in rural areas? How should BI be adapted in the context of rural China if it is necessary? • In general, what attitude would Ganzhou City Government likely to have towards the implementation of BI currently?

Discourse analysis is applied for the data analysis. Transcript of all the interviews and group discussions were coded manually. The codes include three types which are favorable opinion, opposite opinion, and potential strategy. Codes under the favorable opinion column refer to the positive consideration of interviewees on the implementation of BI. Codes under the opposite opinion column refer to the opposite

consideration of the interviewees on the implementation of BI. Codes under the potential strategies column refer to the neutral consideration of interviewees on the implementation of BI which includes the necessary adaptation of the approaches of BI to the context of the case study area or creating preconditions for the implementation of BI in the case study area. Themes are synthesized based on all the codes and categorized into social, economic, and political domains, following the conceptual framework.

5.4. Result

The attitudes towards the implementation of BI from the perspective of the local government in Ganzhou was coded and analyzed following the conceptual framework (See Table 5-5)¹.

¹ Evidence quoted from the interviews on each opinion in Table 5-5 is elaborated in the Appendix.

Table 5-5 Domains, themes, and codes about the attitudes of local government in Ganzhou on the implementation of BI summarized from interview result

Domain	Theme	Code		
		Favorable opinions ¹	Opposite opinions ²	Potential strategies ³
Social domain (S)	Impact on the rural livelihood (S.1)	<ul style="list-style-type: none"> Improvement of rural residents' quality of life (S. 1.1) Maintenance of dignity of rural residents (S.1.2) Relieving the children 's worry about their parents' livelihood (S. 1.3) 	<ul style="list-style-type: none"> Unfairness of BI functioning as rural social security policy (S.1.4) 	
	Impact on the rural social morality (S.2)		<ul style="list-style-type: none"> Potential conflict with hardworking ethic (S.2.1) 	
Economic domain (E)	Impact on the rural economy (E.1)	<ul style="list-style-type: none"> Possibility of promoting the circular flow of local economy (E1.1) Linkage between BI and local financial market and financing services (E.1.2) 	<ul style="list-style-type: none"> Against free market for economic development in the rural areas (E.1.3) Potentially uncontrollable increasing prices of commodities (E.1.4) Disordered local financial market (E.1.5) Unwillingness to spend BI (E1.6) 	<ul style="list-style-type: none"> Combination with government intervention for developing local industries (E.1.7)
	Impact on the local employment (E.2)	<ul style="list-style-type: none"> Lowering the labor cost (E.2.1) 		<ul style="list-style-type: none"> The amount of BI per capita at a high level as a key precondition to enhance local employment (E.2.2)
Political domain (P)	Impact on the future rural governance (P.1)	<ul style="list-style-type: none"> Prevention on reappearance of extreme poverty (P.1.1) Alleviation of the current burden of civil servants (P.1.2) 	<ul style="list-style-type: none"> Necessity of further specifying policy targets (P.1.3) 	<ul style="list-style-type: none"> Necessity of remaining and adjusting existing policies (P.1.4)
	Financing and distributing BI (P.2)		<ul style="list-style-type: none"> Doubt on acceptance of distributing BI through technology (P.2.1) 	<ul style="list-style-type: none"> More expenditure from the municipal public finance on rural policies (P.2.2) Necessity of financial support from superior governments (P.2.3) Increasing taxation and issuing bonds (P.2.4) Linkage between public finance and external capital market (P.2.5)
	Practical preconditions for implementing BI (P.3)			<ul style="list-style-type: none"> Necessity of being nominated as experimental area (P.3.1) Modification on the approaches for the implementation (P.3.2)

¹ Codes under favorable opinion column refer to the positive consideration of interviewees on the implementation of BI.

² Codes under opposite opinion column refer to the opposite consideration of the interviewees on the implementation of BI.

³ Codes under the potential strategies column refer to the neutral consideration of interviewees on the implementation of BI which are the necessary adaptation of the approaches of BI to the context of case study area or creating preconditions for the implementation of BI in the case study area.

5.4.1. Social domain (1): Impact on rural livelihood

Under the social domain, the first theme about the attitudes toward BI is its impact on the rural livelihood (S.1)¹. Under this theme, there are three favorable opinions. The first one is considered that BI can improve the livelihood of residents in rural Ganzhou (S.1.1). This is in line with the theoretical discussion on BI as well as the outcomes commonly identified in the existing BI empirical cases around the world.

“Implementing BI in the rural areas is theoretically able to improve the quality of life of local residents.” (No. 4)

Specifically, the interviewee from the Rural Pension Bureau (No.3) emphasized that BI would likely contribute to improving the health status of rural residents in Ganzhou as going to the hospital more frequently when they have mild illness would be affordable for them.

The expectation mentioned above on BI to improve the livelihood of rural residents in Ganzhou considered by the interviewees is also due to their knowledge of people’s feedback on the limitation of the social security system in the rural areas. In the group discussion with Xingguo County Government (No.5), it is mentioned by the interviewees that many rural residents felt the current benefits they received, such as rural minimum subsistence allowance or rural old pension, are insufficient. Therefore, such a universal benefit for everyone would enhance the capacity of many rural residents to improve their quality of life.

The second favorable opinion about the impact of BI on the rural livelihood is considered that BI can contribute to maintaining the dignity of rural residents who usually do not have a stable income source (S.1.2). In the interview with a Section Chief

¹ Abbreviation and number for each opinion, theme, and domain in this chapter are referred to Table 5-5.

of Rural Pension Bureau (No.3), he pointed out that farmers in rural Ganzhou usually have limited sources to stably obtain income. He said that similarly to rural pension, BI would function as a stable source providing cash revenue to each farmer, especially those old ones. He thought farmers can fully determine the way to use it with a sense of their own money by raising an older farmers' example.

“...an old farmer told me in person that after receiving old pension, he felt happy as he could confidently spend the money to buy snacks and drinks for his grandson. He had a strong feeling that he truly had the right to decide how to use the money.” (No.3)

The third favorable opinion is that BI would likely reduce the worry of children working in the urban areas on the livelihood of their parents who are living in the rural Ganzhou (S.1.3). This point is mentioned in the group discussion with officials from the Bureau of Civil Affairs (No.4). A typical pattern for rural families to maintain their livelihood that the younger generation migrates to urban areas to find jobs and support the daily life expenditure of their old parents and their children in the rural areas through their income. For many younger generations who are from rural areas and working desperately in urban areas, implementing BI in rural areas would indirectly alleviate their pressure as breadwinners for their families.

One opposite opinion in terms of the impact on the rural livelihood is identified as the unfairness of BI functioning as a rural social security policy (S.1.4). Following the national plan of targeted poverty reduction, the current social security system has been strengthened to secure the livelihood of residents by first precisely targeting rural residents who need help and thus precisely provide assists from the accommodation, medical, education, and so on. It is mentioned in the group discussion with the Bureau

of Civil Affairs (No.4) that a universal flat-rate payment with the replacement of the existing social security system would be unfair for the whole society, as the utility of BI varies among all the rural residents with different levels of income. It is afraid that BI might be not enough at all for those who need help while it might be unnecessary for those who do not need such a small amount of money.

“Some people may consider BI, if its amount was equivalent to the standard of rural minimum subsistence allowance 305 RMB per month for example, is absolutely nothing while others may think this amount is not enough at all.” (No.4)

5.4.2. Social domain (2): Impact on the social morality

The second theme under the social domain is about the impact on the rural social morality (S.2). One opposite opinion raised in this theme is relevant to the conflict of BI with the hardworking ethic, one of the most important and traditional values of the contemporary Chinese society (S.2.1). The above opinion is in line with an objection against BI due to the concerns on the appearance of free-riding (Rawls 2009; Zwolinski 2017). Creating wealth through hard work is a common value in the current socialistic Chinese society and a key element of the guiding ideology in Chinese rural governance. It is emphasized in the group discussion with the Bureau of Civil Affairs (No.4) that, like any other universal welfare programs, BI would possibly trigger the issue of laziness in the rural society due to its universality and unconditionality. It may eventually bring negative impacts on the stability of rural society in Ganzhou. Such a consequence is strongly not tolerated by the government in China under any circumstances.

“A universal welfare system such as BI would possibly cause laziness in the society.” (No.4)

One official in this group discussion pointed out the concerns on this potential negative impact of BI on the change of social morality based on the appearance of laziness in rural society due to the current rural minimum subsistence allowance. He considered that BI would especially hinder young to make efforts to pursue their future career.

Furthermore, various BI proposals used for the cost calculation in rural Ganzhou Chapter 3 was also raised in the group discussion (No.4). It is perceived that those proposals are more radical than the current social security system provided in rural Ganzhou following the national plan of targeted poverty reduction. In the officials' point of view, any immediate substantial upgrade on the current standard of social security system in rural areas is not appropriated as it may trigger the appearance of the poverty trap. From the officials' point of view, a crucial strategy to prevent this issue is to design the social security policies strictly based on the social and economic status of the rural areas.

The appearance of such potential issue mentioned above is risky for Ganzhou City government and thus lead many of the interviewees to have pessimistic attitudes towards BI.

5.4.3. Economic domain (1): Impact on the rural economy

Under the economic domain, there are in total three themes are generated based on the codes from the interviews. The first theme is the impact of BI on the local economy in rural Ganzhou (E.1). Two favorable opinions are mentioned in the interviews. The

first one is about its possibility to promote the circular flow of the local economy through the expansion of local consumption and local production and maintain the wealth within the rural areas (E.1.1).

According to the interview with a Vice-director of the Office of Poverty Reduction in Ganzhou City Government (No.1), the stimulation from BI on the consumption in the local market is considered in line with the promotion on the consumption on local products and services, a key strategy of the National plan of targeted poverty reduction. The local economy is expected to be developed as the expansion of local consumption brought by BI would lead to the growth of the local industry and create more job opportunities. It is also agreed that instead of cash payment, BI implemented as local currency or local points system, which is only circulated within the implemented areas, would also possibly achieve such goal mentioned above.

“I think if BI was implemented in not only in cash, but also, for example, in local currency or point, it would theoretically be conducive to enhance the consumption in the local market and stimulate the provision of local job opportunities to allow people to create wealth” (No.1)

The second favorable opinion in terms of the impact of BI on the rural society is about its linkage to the local financial market and financing services (E.1.2). In the interview with the CPPCC member (No. 7), he pointed out that BI would be helpful to enhance the credit of rural residents in the financial market.

“BI could be used for the credit investigation on receivers, which consequently enhance the credit of a large amount of rural population in the capital market.” (No.7)

There are in total three opposite opinions indicating that BI may reversely damage

the rural economy in rural Ganzhou. The first one is that it is against the free market in economic development in the rural areas (E.1.3). BI is perceived by some of the interviewees working at the grass-root sector as another practice of an egalitarian approach. The officials from the Xingguo County government raised the concerns that BI is similar to the people's commune which was widely implemented in China in the 1960s. The failure of such an egalitarian approach formed their impression on BI that it would be against the principle of free market and competition, and consequently would interfere with the development of local industries and economy. They emphasized that the market should still play an important role in economic development even in the rural areas, and thus BI would be against such governance guiding ideology.

The second opposite opinion on BI is that its implementation may lead to potentially uncontrollable increasing prices of local commodities (E.1.4). In the group discussion with officials from the Xingguo County government (No.5), one concern was pointed out that once BI was implemented, the current stabilized supply-demand relationship in the local market would be possibly changed. Consequently, it is likely that the price of local commodities would commonly increase at least at the initial phase of the implementation of BI, and how long such fluctuation of market price would be stabilized is with uncertainty.

“Implementing a universal cash payment scheme like BI will probably lead to the price increases in the rural areas. And it is not sure how long the market price will be stabilized” (NO.5)

In the group discussion (No.5), an official from the Xingguo County government considered that it would be risky for the government if the local production cannot effectively be stimulated to fulfill the increasing demands of rural residents caused by

BI as it will affect the stability of the society. He doubted the local supply-demand relationship cannot become balanced quickly in a short time, as the growth of local industries takes time and possibly cannot match the local residents' increasing demand relevant to daily life.

The third opposite opinion is about the disordered local financial market (E.1.5). Implementation of BI in local currency or local points were also mentioned as an optional strategy to implement BI in the group discussion with the officials in the Xingguo County government (No.5). The officials pointed out that the exchange of between BI implemented local currency and legal tender should be prudently taken into consideration. Once the local production cannot fulfill the demand of rural residents, they would still purchase the products produced outside of the BI-implemented areas. This would largely limit residents' motivation to use of local-currency BI. And if BI could be freely exchanged to legal tender, bank run would possibly happen.

The fourth opposite opinion on BI under the theme of impact on the rural economy is relevant to the concern that rural residents may commonly reluctant to spend BI immediately as expected (E.1.6). According to the group discussion with the Financial Bureau of Ganzhou City Government (No.6), the officials considered that the traditional consumption behavior and the insufficiencies of the current social security system lead rural residents to prioritize to save their cash for future purposes rather than spend it immediately. This would consequently limit the impact of BI to stimulate the expansion of the local consumption market.

Finally, one potential strategy that appeared in this theme is about the combination with the government intervention for developing local industries (E.1.7). The attributes of BI as a development policy was doubted by an interviewee from the Financial

Bureau of Ganzhou city government in the group discussion (No.6). In his point of view, even if BI was considered having an impact on developing local economy as argued in the academia, it is risky for the government to finance this policy, especially through issuing bonds, as it is unrealistic for the government to simply anticipate the boost of economic development in the rural Ganzhou by universally distributing money to all the residents without ensuring the profits at first. A compromised solution might be that the government provides guidance on BI receivers to use BI to develop any projects with profits ensured forehead. Laziness-faire is too risky for the government and a close combination with the purposes for developing industries developing local industries is considered required for implementing BI.

Furthermore, another interviewee from the Financial Bureau in the group discussion (No.6) also doubted that without any intervention from government or any institutional collaborations, it is difficult for any individual rural resident to establish agricultural-related projects even in such laissez-faire environment created by BI. In his point of view, the agriculture industry in rural Ganzhou is commonly featured with a small scale, and it is difficult to expand the scale due to the geographic constraint, which consequently limits the potential of generating profits. Therefore, it would be too risky for the government to make use of public financial resources or issue bonds to support BI with anticipation on the development of the local industry through such an individual endeavor. He emphasized that agricultural cooperation or village committees should take predominant roles and the government can provide financial subsidies including BI in the development of the local industry.

5.4.4. Economic domain (2): Impact on the local employment

The second theme in the economic domain is about the impact of BI on the local employment (E.2). Under this domain, there is a favorable opinion and a potential strategy on BI. The favorable opinion on BI is that it may lead to lower the labor cost in rural Ganzhou (E.2.1).

The CPPCC member in the interview (No.7) mentioned that as it is likely that the implementation of BI would possibly attract residents in neighbor rural areas out of Ganzhou to migrate to the implemented area, which might consequently reduce the labor cost in rural Ganzhou.

“The implementation of BI ... may lead ... that people from outside of Ganzhou may be willing to migrate to here... A positive one is that the labor cost in the rural areas might be reduced with the increasing of labor supply” (No.7)

However, a potential strategy on BI that how much BI per capita should be determined is also considered a key precondition when discussing the potential of BI on enhancing rural residents to work locally in the rural areas (E2.2). The officials from Xingguo County government pointed out that in China currently people can earn way much more in the urban areas in the coastal provinces such as Guangdong, Zhejiang, Shanghai than rural areas in Ganzhou. This argument is in line with the secondary data. Currently, the economic gap within China between coastal regions and inland regions is still significant. As shown in Figure 5-4, the average income per capita in the coastal provinces such as Shanghai, Zhejiang, and Guangdong are between 33,000 to 60,000

RMB in 2017, while in the inland province provinces such as Jiangxi is merely 22,031 RMB.

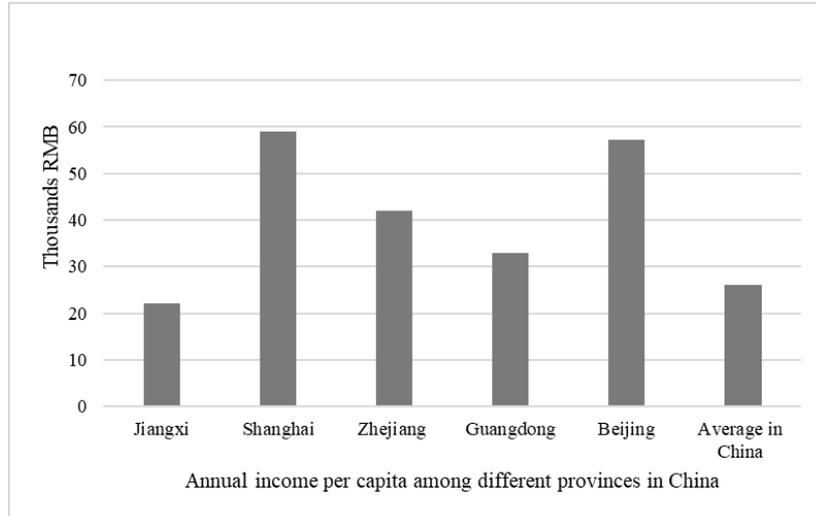


Figure 5-4 Annual income on average per capita among different provinces in China
Made by the author based on the China Yearbook 2018 (National Bureau of Statistic of China 2018)

Therefore, despite BI provided for rural residents within working age is ideally supposed to contribute to promoting them to be locally employed, it is considered to lack of attractiveness for motivating people to work locally through the implementation of BI if it was unable to set at an attractive level which at least should be much higher than the current rural minimum subsistence allowance.

“If the amount of BI is decided at the level of around 300 RMB per month..., I think it is insufficient to attract people to stay in their hometown...if it was raised to 1,000 RMB, it is likely to have positive impacts to enhance people work locally” (No.5)

5.4.5. Political domain (1): Relationship with the future rural governance

There are three themes generated under the political domain. The first domain is about the concerns on the relationship of BI with the future rural governance (P.1).

There are two favorable opinions on BI under this theme and the first one is its potential linkage to the upcoming rural revitalization by preventing the reappearance of extreme poverty (P.1.1). One of the main concerns that the government at different levels in Ganzhou have on the future rural governance is how the current achievements under the National Plan of Targeted Poverty Reduction in Ganzhou would be maintained after 2020 (the ending of the 13th National plan 2015-2020). Furthermore, the same to other rural areas in China, the policy focus will be soon shifted from the National Plan of Targeted Poverty Reduction to Rural revitalization since 2018 in Ganzhou. Thus, as mentioned in the interview (No.1) with the Vice office director of Poverty Reduction, it is worth of discussing whether BI could be involved in the future policies packages for avoiding the reappearance of the poverty issues in the period of post Targeted Poverty Alleviation, and for triggering the rural revitalization in the next step.

“I think BI could possibly be applied as an approach contributing to the rural revitalization after the era of target poverty reduction as it can prevent many rural residents to fall into the extreme poverty issues again.” (No.1)

The second favorable opinion on BI focus on its potential on reducing the administrative cost of government at all levels in Ganzhou (P.1.2). Officials from the Bureau of Civil Affairs raised that BI could contribute to alleviating the burden of civil servants currently sparing no efforts in operating the social security system. Taking the process of identifying poor household, he mentioned that currently, it is not affordable for the local government in Ganzhou to pay for the services provided by the private sector and all the process has to be managed by the civil servants.

In total, one opposite opinion and one potential strategy on BI are also identified in the interviews. Some officials from our interviews considered that linking to what has

been being done in the targeted poverty reduction, the government must give priority to further specifically distinguish different types of the population as targets and release more accurate policies for them in the period of the post-targeted poverty reduction, instead of first considering launch universal welfare programs like BI (P.1.3). One example raised in the interviews is a new categorization defining those households with an annual household income level at 1.5 times of the poverty line as pre-poor households.

The reason why the officials have such a point of view from the perspective of government is that in the targeted poverty reduction, certified poor households have been entitled many benefits which are increasingly causing a gap between other households, especially those who are close to the national poverty line. Therefore, how to alleviate such a gap is crucial for the local government to address as upcoming agenda in the period of post-targeted poverty reduction.

Correspondingly, the potential strategy on BI under the theme is not against the implementation of BI but emphasized the importance of remaining and adjusting existing policies instead of simply abolishing all of them (P.1.4). In case BI was implemented, it is considered that some of the privileged policies, for example, education or medical health, in the existing rural social security system targeting certain groups of rural residents should still remain at least at the initial phase of implementing BI in rural areas.

5.4.6. Political domain (2): Financing and distributing BI

The second theme under the political domain is relevant to how BI is financed and distributed (P.2). Four potential strategies are considered for feasibly implementing BI

based on the concerns on the public finance. The first one is that more expenditure from the public finance at the municipal level is required on the rural policies (P.2.2). How BI could be possibly financed is a significant practical issue for the discussion on its feasibility of the implementation in the future. It is identified from the interviewees (No.2 and No.) that the adjustment on the existing financial expenditure of the Ganzhou Government is of necessity to finance BI. Similar to the consideration on upgrading the amount of current rural old pension in Ganzhou, a straightforward way to finance the implementation of BI in the rural areas should require more financial expenditure from the public finance at the city level, as currently the financial expenditure in the provision of public services in the rural and urban areas are unbalanced in Ganzhou City (See Figure 5-5).

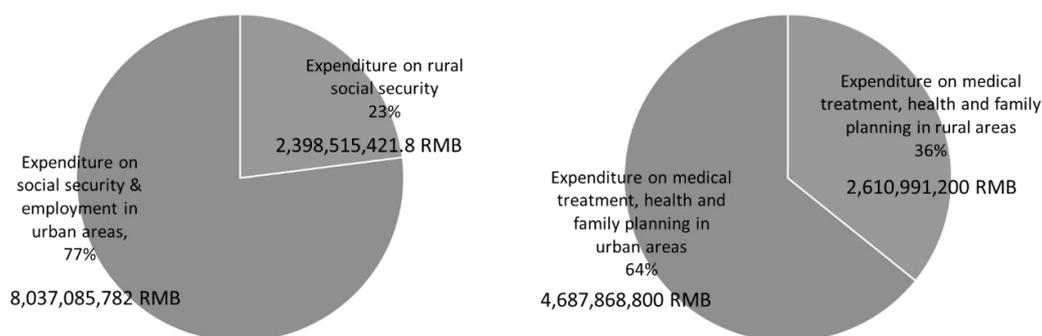


Figure 5-5 Comparison of the government expenditure on social security (left) and medical treatment, health and family planning (right) in between rural and urban areas in Ganzhou, 2016

Made by the author based on Ganzhou Yearbook 2017 (Ganzhou City Government 2017)

The second potential strategy on BI is the necessity of financial support from the superior government (P.2.3). Compared with the appeal mentioned above to increase the expenditure from public finance at the city level to finance BI, a more conservative attitude identified in the interviews reveals that the Ganzhou City government cannot

implement BI merely by further increasing financial deficits. As the transfer from the superior government is a key source supporting the financial expenditure of Ganzhou City. In the case of financing BI, it cannot be implemented without financial support from the provincial and central government.

“According to our current situation, if we were about to launch BI, we have to rely on the financial allotment from the central government. (No.6)

The third potential strategy is about increased tax revenue and issuing bonds as pathways to finance BI (P.2.4). In the interview with the CPPCC member (No.7), It is anticipated that increased tax revenue from the local enterprises can be used to finance BI if the industries in the entire Ganzhou City, including both urban and rural areas, are further developed.

Furthermore, issuing bonds for a direct purpose of financing BI is impossible as there would be no monetary profits generated from this policy. Thus, a compromised solution is thus considered to issue bonds to investment on projects which are profitable to the economy in rural areas through issuing bonds, and then utilize the profits to finance the BI in the rural areas.

The fourth potential strategy is about the linkage between the financing source of BI and the external capital market (P.2.5). The CPPCC member in the interviews (No.7) proposed that a more flexible and integrated utilization of the deposits or funds charged or operated by the government when they are idle in the financial market with monetary leverage is anticipated. Consequently, the profits from the investment would be able to contribute to financing BI for rural residents in Ganzhou.

There is one opposite opinion regarding the acceptance of distributing BI in digital money (P.2.1). Local currency or points through technology is also raised in the

interview with the CPPCC member (No.7). He raised a concern that there might be difficulties for rural residents to adopt such technology due to the knowledge gap.

5.4.7. Political domain (3): Practical preconditions for implementing BI

The third theme under the political domain is about the practical preconditions for implementing BI (P.3). Two potential strategies are identified from the interview. The first one is that a key precondition for implementing BI, Ganzhou should be nominated as the special experimental area for BI by the central government (P.3.1). Otherwise, the implementation of BI in the rural areas (initiated by the local government) is impossible. It would be politically risky for any local government in China to take premature measures to keep the wealth within a certain area as the economic development of their neighborhood regions would be damaged.

“If Ganzhou implemented BI for strengthening local economy without any top-level policy design from the central government, the economic development of our neighboring regions would be possibly influenced negatively as the human resources or money in those regions would possibly migrate to Ganzhou. This is politically not applicable in the context of China.” (No.5)

Furthermore, in the interview with CPPCC member (No.7), it was mentioned without being nominated as an experimental area, it would be impossible to initiate the reform of public finance of local government to link to the capital market to finance the implementation of BI as identified in the P.2.5.

The second potential strategy is the implementation of BI should fully take the current social and economic status of China into consideration and modification on the

approaches to the implementation is required (P.3.2). The director from the Office of Poverty reduction (No.1) considered that changes should be made on the content of BI policy. In his point of view, A proposal similar to the one proposed in the Swiss referendum, that compensating every citizen to reach the standard of 2500 CHD per month, relatively more acceptable than following the original definition. Furthermore, targeting specification, despite it is more or less against the universality raised in the definition of BI, is considered necessary from the perspective of government.

5.5. Discussion

5.5.1. Overview of the attitudes of local government in Ganzhou on the implementing BI in rural areas

Some of the interviewees agreed that BI does have the potential to generate some positive impacts on the rural society and economy in the long term. Nevertheless, their attitude to the implementation of BI at present is in general interpreted to be not positive. Three constraints are considered to hinder them to positively agree with BI. The first constraint is because of the risk to undermine the stability of rural society and local economic development. From the point of view of the Ganzhou Government, BI makes against the traditional value of Chinese society, which is likely to arouse the issue of laziness or poverty trap as identified in S.2.1. The appearance of such issues is against the goals that the national plan of targeted poverty reduction would like to achieve and thus is extremely not tolerated by local government in Ganzhou. Furthermore, as pointed out in S.1.4 and P1.3, the government also expressed the concerns about the limitation of BI functioning on securing all rural residents' livelihood if other policies are replaced, which would potentially have negative impacts on the stability of society.

Besides, the uncertainty of prices and financial market, as identified in E.1.3, E.1.4, and E.1.5, is definitely not desired by local government in Ganzhou, despite it is likely helpful to the development of local economy and local industry and can be used for enhancing farmer's credit in the financial market. Finally, according to the opinion delivered from E.1.6 and E2.2, it is debated that the potential impacts of BI to stimulate the economic development by expanding the local consumption or to enhance the local employment may be limited due to the social, economic and cultural characteristics in China.

The second constraint hindering the Ganzhou city government reluctant to accept BI is about their rejection on the radical attributes of BI. From the point of view of the local government, BI is perceived as a radical approach that is not tallying with the current social and economic conditions of rural Ganzhou. Specifically, it extremely surpasses the current social security provided in rural areas at present. The national plan of rural targeted poverty reduction will be officially finished in 2020. An upcoming key challenge for the Ganzhou City government, like other municipalities in China, is how the current outcomes in the rural targeted poverty reduction could be maintained after 2020, and how the current rural policy system constructed based on the rural targeted poverty reduction would be connected to the requirement of the national strategy of rural revitalization. The interview result reveals that the government tends to set clear policy goals addressing specific rural issues like health, education, or local industrial development, and further specify policy targets provided with accurate policy support. Apparently, the universality and unconditionality of BI determined that it is not in line with the above key ideas of the Ganzhou City government in making future rural policies.

Limited capability of local government to initiate BI as a local policy is considered the third constraint. According to the result of cost calculation in Chapter 3, the cost of implementing BI is unaffordable for the public finance of Ganzhou City at present which is limited by the local economic scale. As identified in P.2.3 and P.2.5, without external financial support such as the public finance transfer from provincial or central government, it is impossible for the Ganzhou City government to finance such a universal cash program in rural areas. Furthermore, the authority of the Ganzhou City government to initiate policy reform is considered necessary from the interviews (P.3.1). As BI is considered a policy possibly bringing both diverse benefits and risks to the rural society and economy, the Ganzhou City government has to be prudent to the implementation of such radical policy. Attempt to keep the wealth only circulated in a certain area might result in the decline of the economy of neighborhood areas is politically risky for any local government in China. It would be improper for any local governments to proactively implement such a policy like BI without being nominated as an experimental area in China.

5.5.2. Key points to promote the implementation of BI in the rural areas in the Chinese context

Based on the interview result, several key points should be considered in promoting the realization of implementing BI as a formal policy in rural areas in the context of China. The key points are shown as follows.

First, BI should be closely interrelated with the strategies of local economic and local industrial development in rural areas.

Second, the government should provide proper guidance on how BI could be used

in either the consumer market or the local financial market.

Third, a mechanism to prevent the chaos of price and finance order need to be designed before the implementation of BI (For example, set expire data of BI if it was distributed as local currency. This could be easily realized through cryptal currency or any cashless payment technology).

Fourth, compromised modification on the concept of BI commonly raised in academia is needed. The modification includes, for example, specifying different groups of people and adjust the targets accompany with the national plan, or determining the amount of BI in a compensation mechanism such as the one proposed in Swiss Referendum in 2016.

Last but not least, a top-level policy design from the central government is important. For the local government in any place, the authority to implement BI in rural areas should be given to the local government by being nominated as an experimental area. A mixture of the egalitarian approach with free-market principles should be confirmed into the guiding ideology of the rural governance in the experimental area. Furthermore, aiming to explore the financial source of BI, corresponding reform of existing public finance should also be initiated in order to ensure the local government has more authority to determine the financial budget. Integrated use of budgets belonging to different bureaus of the government is required. Public finance should be more closely linked to the financial and capital market.

5.6. Conclusions

The attitudes of government towards BI and its implementation is of importance for any debates on the feasibility of implementing BI in rural areas in the context of

China. Taking Ganzhou as a case study, this chapter investigated the attitudes of local government in Ganzhou on the proposal of implementing BI at present in rural Ganzhou through qualitative approaches. By interviewing officials from different sectors of local government at the municipal and county level, it is concluded that the local government in Ganzhou considered BI would likely bring diverse impacts, which are either favorable or opposite by the local government, on the rural Ganzhou from social, economic and politic domains if it was implemented at present. Furthermore, from the perspective of local government in Ganzhou, potential strategies on adapting the approach of BI to the context of China or creating preconditions for the implementation of BI is also required to realize BI as a formal policy in rural China.

As a key result, the general attitude of local government in Ganzhou on the implementation of BI in rural areas at present is interpreted to be not positive. It is argued that diverse constraints including the risk on the stability of rural society and local economic development, rejection on the radical attributes of BI, and limited capability of local government to initiate BI as a local policy. Finally, five points are raised, based on the interview results, which are considered important for any debates on how to promote the realization of implementing BI in the context of rural China or what is needed from the perspective of local government for the implementation of BI in rural areas in China. The key points include the enhancement of close linkage between BI and current strategies for the economic and industrial development in rural areas, the provision of guidance on the use of BI, preparation of mechanism preventing potential risk on the local economy and local financial market, modification on the approach of BI according to the current rural social and economic status, and the top-level policy design from central government.

Due to the time limitation and boundary of this research, the central government is not targeted for the investigation in this research. However, considering the governance structure in the context of China, it is also of importance to understand the attitudes of the central government on BI as it would play a key role in the policymaking process. The focus of the Central government on BI would be likely relevant to the questions such as how BI would reshape the entire rural China in the future and what goals BI is anticipated to achieve in combining with the national plan, and are undoubtedly different from the current consideration of local government on this innovative approach. Thus, future research should target the central government as well in order to capture a complete picture showing the attitude of the Chinese government on the implementation of BI.

Chapter 6. OPPORTUNITIES, CHALLENGES AND STRATEGIES ON ENHANCING THE FEASIBILITY OF IMPLEMENTING BI IN THE RURAL CONTEXT OF CHINA AND JAPAN

6.1. Linkage between BI and existing rural policies in China and Japan

For any debates on whether BI is feasible to be implemented in a given rural context, how BI could be possibly embodied in the existing policy framework of that context should be taken into consideration. As mentioned in the previous chapters, the government of Japan and China have described the future image of rural areas and designed comprehensive strategies on guiding to achieving the goals at the national level. In Japan, the central government has raised the General Strategies of Overcoming Population Decline and Vitalizing Local Economy” (Machi Hito Shigoto Sousei Sougou Senryaku) in 2014 and its implementation has just entered the second term in 2020. In the meantime, the central government in China has been putting efforts into achieving the elimination of the absolute poverty issue in the rural areas by 2020 through target poverty reduction movement. As a follow-up plan to maintain the outcomes of targeted poverty reduction and trigger future development in rural areas, the national strategy of rural revitalization was raised by the central government in 2018.

Based on the content of the national plans in China and Japan, and the potential impacts of BI on rural society, economy, and governance, reciprocal linkages exist between what BI can achieve and the policy visions in rural areas at the national level in the two countries respectively. As shown in Table 6-1, if BI was implemented as a normal policy in the rural context in China, it is possibly able to contribute to achieving diverse policy visions raised in the establishment on the modern agricultural

management system, improvement on the system of supporting and protecting agriculture, promotion on in-depth integration of agricultural industry, improvement on a tight benefit-sharing mechanism, stimulation on the innovation and starting-up business in rural areas, consistent improvement on the living condition of rural areas, enrichment on the cultural life in rural areas and enhancement on the quality of employment of rural labors. In the meantime, achievements on the policy goals relevant to the industrial development would contribute to creating preconditions for the implementation of BI by promoting the profits of entire agricultural industries and thus strengthening the local public finance.

Table 6-1 The linkage between BI and policy visions from the National Strategies for Rural Revitalization in China

Domains	Policy vision	Potential reciprocity (the linkage between BI and the policy goals of national plan for rural revitalization)	
		Benefited from the implementation of BI	Beneficial to the implementation of BI
Accelerate the agricultural modernization	Consolidate the basis of agricultural productivity		✓
	Accelerate the transformation and upgrading on agriculture		✓
	Establish the modern agricultural management system	✓	✓
	Strengthen the support on agricultural technology		✓
	Improve the system of supporting and protecting agriculture	✓	
Expand the industries in the rural areas	Promote in-depth integration of agricultural industry	✓	✓
	Improve tight benefit sharing mechanism	✓	✓
	Stimulate the innovation and starting-up business in rural areas	✓	✓
Construct beautiful rural areas with a pleasant living environment	Promote the green development of agriculture		
	Consistently improve the living condition of rural areas	✓	
	Strengthen the ecological protection		
Promote rural civilization	Promote the ideological and moral education in rural areas		
	Advocate outstanding traditional Chinese culture		
	Enrich the cultural life in rural area	✓	
Establish a modern governance system in rural areas	Strengthen the leading role of the grass-roots organization of Chinese Communist Party in the rural revitalization		
	Promote the combination among autonomy, law and virtue.		
	Consolidate grass-roots governments		
Secure and improve people's livelihood in rural areas	Enhance the infrastructural construction in rural areas		
	Increase the provision of public services in rural areas		
	Enhance the quality of employment of rural labor	✓	

Made by the author based on the information from the State Council of China (Xinghua News Agency, 2018)

Similarly, in the context of Japan, BI could contribute to achievements on different fundamental goals in the comprehensive strategies of “act on overcoming population decline and vitalizing local economy. As shown in Table 6-2, regarding Goal 1 Allowing people feel at ease to work while making the region rich, if BI was implemented, it is supposed to positively enhance the achievements on the growth of agricultural, forestry and fisheries, branding the attractiveness of local areas and promoting the international collaboration, creation of sustainable innovation boosted from local areas, promotion of metabolism and activation of local industry and ensuring the funding for growth and

improvement of management through collaboration with local financial institutions. BI would contribute to the promotion of local immigration in Goal 2 Establishing the connection to the local areas and creating new migration trends to local areas. The implementation of BI would further support on achieving the preparation of the environment for easily getting married, giving birth, and raising children under Goal 3. Finally, if BI was able to be implemented in certain neighboring rural areas, it would enhance to make these rural areas an attractive regional circular as mentioned in Goal 4. In the meantime, the achievement of the diverse policy visions mentioned in Goal 1 and the creating and expanding the cash flow to local areas in Goal 3 would possibly lead to an increasing public finance revenue through taxation and thus provide a source on funding BI.

Table 6-2 The linkage between BI and the policy vision from the General Strategies of Overcoming Population Decline and Vitalizing Local Economy

Fundamental goal	Sub goals	Policy visions		Potential reciprocity (the linkage between BI and the policy goals of national plan for rural revitalization)	
				Benefited from the implementation of BI	Beneficial to the implementation of BI
Goal 1 Allowing people feel at ease to work while making the region rich	1-1 Realization of high productivity and rich regions according to the features of the region	1-1-1 Enhancement of competitiveness of the regions making use of the local resources and local industries	① Realization of the industrial revolution of local enterprises		✓
			② Centralized support to the enterprises leading the local economy		✓
			③ Growth of agricultural, forestry and fisheries		✓
			④ Branding the attractiveness of local areas and promoting the international collaboration	✓	
			⑤ Creation of sustainable innovation boosted from the local areas	✓	✓
			⑥ Promotion of metabolism and activation of local industry	✓	✓
			⑦ Ensuring the funding for growth and improvement of management through collaboration with local financial institutions	✓	
	1-1-2 Formation and secure of professionals				
	1-2 Realization of chilling working environment	1-2-1 Secure of attractive working environment for people easy to work and its operators			
Goal 2 Establishing the connection to the local areas and creating new migration trends to local areas	2-1 Promotion of migration and Settlement in local areas	2-1-1 Promotion of migration to local areas	① Promotion of immigration to local areas	✓	
			② Promotion of transfer to local migration		
		2-1-2 Promotion of settlement of young people through study and employment	① Cultivation of professionals for local industry through revitalization of local university		
			② Strengthen the function of high schools		
	2-2 Establishing the connection with local areas	2-2-1 Creation and expansion of regional experience seekers	① Ground planning for people being regional experience seekers		
			② Initiatives of regions accepting regional experience seekers		
	2-2-2 Creating and expanding the cash flowed to local areas			✓	
Goal 3 Achieving the wish of getting married, giving birth and raising children	3-1 Preparation of the environment for easily getting married, giving birth and raising children	3-1-1 Support to get married, give birth and raise children		✓	
		3-1-2 Balance between work and raising children	① Realization of work-life balance	✓	
			② Promoting female to be active	✓	
		3-1-3 Promotion of regional approaches			
Goal 4 Making the region attractive by allowing people to come to gather and live with peace of mind	4-1 Ensuring the environment generating vitality and realizing reliable life	4-1-1 Enhancing the function of local areas for good quality of life	① Formation of attractive local city living sphere		
			② Formation of attractive village living sphere		
			③ Formation of attractive cities through enhancing global competitive power		
			④ Fostering attractive regional circle through regional collaboration	✓	
	4-1-2 Formation of unique regions through the utilization of local resources	① Village planning for utilizing regional resources			
		② Planning for sightseeing regions			
		③ Town planning through culture			
		④ Town planning through sports and health care			
		⑤ Town planning for utilizing regional energy resources			
	4-1-3 Town planning for being able to live with peace of mind	① Secure the community functions including medical and welfare services			
② Secure the regional disaster prevention					
③ Secure the regional transportation safety					

Made by the author based on General Strategy of Overcoming Population Decline and Vitalizing Local Economy (Second Phase) (Cabinet Office of the Japanese Government, 2019)

Such reciprocal linkages between BI and existing policies in the rural context contribute to providing justifiable ground to practically involve BI into the current rural policy design.

6.2. Challenges on implementing BI in the rural context of China and Japan

6.2.1. Public finance

How to finance BI in the long term is a key challenge to be addressed for feasibly implementing BI in the rural context of China or Japan. Putting the differences of governance systems aside, an ideal situation of financing BI in a certain rural area both in China and Japan is that the cost of BI could be fully covered by the local public finance of that rural area. The result about the cost of BI calculated in the case of rural Ganzhou or Sado in Chapter 3 is not in line with the theoretical impact of BI on alleviating the financial burden of government through a simplified bureaucracy (Kangas et al. 2017) and a loosen regulation (Davies and Bregman 2017). The current local public finance is commonly limited either in Ganzhou or Sado. As elaborated in Figure 3-3, even if BI scenario with the lowest estimated cost was implemented at present either in rural Ganzhou or Sado, a large financial deficit would still be immediately created which is definitely not affordable based on the local public finance at the current level in both of the two case study areas.

Admittedly, financial support from the superior government is of necessity for the implementation of BI in the rural context. A key question thus would be how long such financial support from the superior government would last for. In China, the communist governance system principally allows the central government to provide long-term stable financial support on the implementation of BI in certain rural areas without

requirements on achieving any short-term goals. However, it is likely that the central government would not prematurely do that merely for dramatically improving the welfare of residents in any of the rural areas in China. In fact, considering the policy vision raised in the national strategy of rural revitalization in China, the motivation of the central government to agree with BI would be linked to eventually establish a long-term sustainable revitalization pattern reciprocally combining the development of local economy and industries and the improvement of rural welfare together. In that sense, the financial support from the central government would possibly function as a short-term stimulation rather than a long-term engine to sustain this policy.

On the other hand, in Japan, the central government may support BI by perceiving it as an approach toward welfare reform, which are commonly raised in the debates on BI in other developed countries (Jordan 2012; Koistinen and Perkiö 2014). However, compared with China, a democratic governance system implies a more complicated and difficult decision-making process for the Japanese central government to pass a national budget providing long-term financial support on financing the BI in certain rural areas, considering that BI is apparently not beneficial to the majority of the Japanese nationals at all.

In summary, the justification for the provision of financial support on financing BI from outside of the implemented areas is required both in China and Japan.

6.2.2. Local policymaking process

How BI is perceived by the key stakeholders involved in the local policymaking process is also important. In China, local government plays an important role in leading the trails in policy reforms. BI is argued to have theoretical impacts on improving

people's quality of life (Ferguson 2010; Haagh 2015; Sircar and Friedman 2018). However, following the argument in Chapter 5, the above positive aspect of BI seems not attractive enough for the local government in Ganzhou to initiate this policy. The result in Chapter 5 reveals that BI is overall perceived by the local government in Ganzhou at present as a too radical approach because it is higher than the level of the social security system provided in rural areas. Furthermore, the potential appearance of free riders caused by BI (Zwolinski 2017; Colin 1999) argued in the theoretical discussion was not tolerated by the local government in Ganzhou as it is against the social morality in China feature with hard-work ethics. The potentials of BI to undermine the stability of rural society and economy in a broader region including other neighboring areas is politically risky for any of the local governments in China. The concerns on the above political risk would lead the local government to be reluctant on accepting BI, despite the positive impacts potentially brought by this policy have attracted the interests of local government to some extent.

In Japan, the democratic governance ensures whether policy reforms, especially those directly influencing the individual's welfare, could be initiated is fundamentally determined by the vote. Therefore, in the case of BI implemented in a certain rural area, a key challenge is whether BI proposed in that rural area could be accepted by the majority of its residents. As identified in Chapter 4, an individual's decision on whether agree with the implementation of BI would be possibly influenced by diverse factors based on his/her concerns on the gain and loss from a trade-off selection between BI and existing policies. In other words, the implementation of BI with the replacement of existing policies can barely be beneficial to all the residents and some people are likely to lose their benefits. This could possibly result in the failure of launching BI once the

proposal is rejected by the majority of the local residents in a given rural context.

In summary, the attitude of stakeholders involved in the local policymaking process identified in rural Ganzhou or the Hokuriku region implies difficulties to initiate BI as a local policy in the rural context of China or Japan.

6.3. Strategies to enhance the implementation of BI in the rural context

6.3.1. National-level policy design for the local-level implementation

The top-down approach at the national level is needed even though BI is not designed to be implemented in the entire rural areas of a country. As explained previously in this chapter, in Japan, if it is treated as local policy reform, whether it could be realized fundamentally depends on the rural residents' vote. BI can barely be implemented in a certain rural area if it was at the beginning not able to be agreed by the majority of its residents, of which its occurrence is possible as what has been found in the survey conducted in the Hokuriku region. Therefore, if BI is strategically positioned as a national policy, it would reduce the potential constraint mentioned above. And also issue of securing the financial sources on this policy, at least in the initial phase, would be addressed with the budget allocation from the central government. Undeniably, the solution is imperfect as a contingency question should be addressed why the tax paid by all the nations should be used for a policy which is not beneficial to the majority of them at all. This is again closely linked to the issue of how to finance BI in the long run.

Top-down policy design at the national level seems a one-size-fits-all solution for feasibly implementing BI in the rural context of China. Under the communist governance system, the central government in principle is capable of playing a predominant role in determining where BI would be implemented from the national

level. The central government can also organize large-scale BI social experiments by nominating some municipalities as experimental areas. Consequently, it would fundamentally release the political risks, as we identified in the case of Ganzhou, concerned by local government on undermining the stability of the broader regional economy and society due to the implementation of BI. Furthermore, the top-down approach is also needed for securing the financial source of BI in rural areas. In the interviews with local government in Ganzhou in Chapter 6, an integrated use of the existing public financial revenue of the local government on the investment of external capital market, like what has happened to the management of the old pension fund in Japan, is proposed to generate profits to finance BI. The realization of the above approach first requires a reform on the current local public finance approval by the central government.

What could be accomplished at the national level may vary due to the capacity of the central government under different governance systems in China and Japan. Nevertheless, Grass-root initiation from the local level is not sufficient and the movement from the national level should also be emphasized for realizing this policy in rural areas.

6.3.2. Strengthen the local economy and industries and diversify financing methods

Irrelevant to the differences in the governance systems in China and Japan, a stable financial source is significantly desired to practically secure the implementation of BI. Admittedly, financial supports from the superior government is necessary for implementing BI in rural areas at least at the initial phase of the implementation. However, whether BI in a certain rural area can be sustained in the long run would also

be affected by the revenue of its local government and that is fundamentally determined by the local economy and industries. The linkage between BI and local economic development is especially important for the rural context of China, following the argument that the central government would integrate the purpose of developing local economy and industries into the policy agenda for implementing BI. Good local industries, which refer to those creating high added value by, for example, effectively making use of the local resources, are anticipated to be developed. One typical example is the energy industry, like what happened in the case of Alaska Permanent Fund Dividend (US (5) in Chapter 2) that the fund is financed based on the revenue of the state-owned oil business. Despite the uniqueness of the above example implies that it cannot be commonly applied in the rural context in China or Japan, an important lesson learned from it is that tax revenue from the local industries is an essential source on financing BI in the long-term perspective. Thus, the government should support the development of local industries by providing subsidies through allocating the existing budget or issuing bonds (e.g. the fiscal investment and loan programs (FILP) in Japan or the special bonds in China). Especially in China, the government could also promote the development of government-owned enterprises and newly generated profits could be utilized to finance BI for all of the local residents.

Methods for financing BI should be diversified in accompany with the promotion of developing the local economy and industries. A potential mechanism on financing BI in rural context from multiple sources is presented in Figure 6-1. As the cost of BI is identified unable to be covered merely by the existing financial revenue of municipal government based on the result of cost calculation in Chapter 3, budget allocation from the superior governments and sometimes together with the taxation targeting on urban

residents (e.g. Furusato Nouzei Donation program in Japan) are argued necessary. The expenditure of BI by rural residents on locally produced products or services is supposed to generate monetary flow to local industries. In the meantime, subsidies from the municipal government and central government, if it is possible, to support the development of local industries are anticipated. With the development of local industries, more job opportunities would possibly be created for local residents and thus their income source, other than BI, can be secured. The public finance of municipal government is expected to be strengthened from a vitalized local economy and consequently contribute to financing BI.

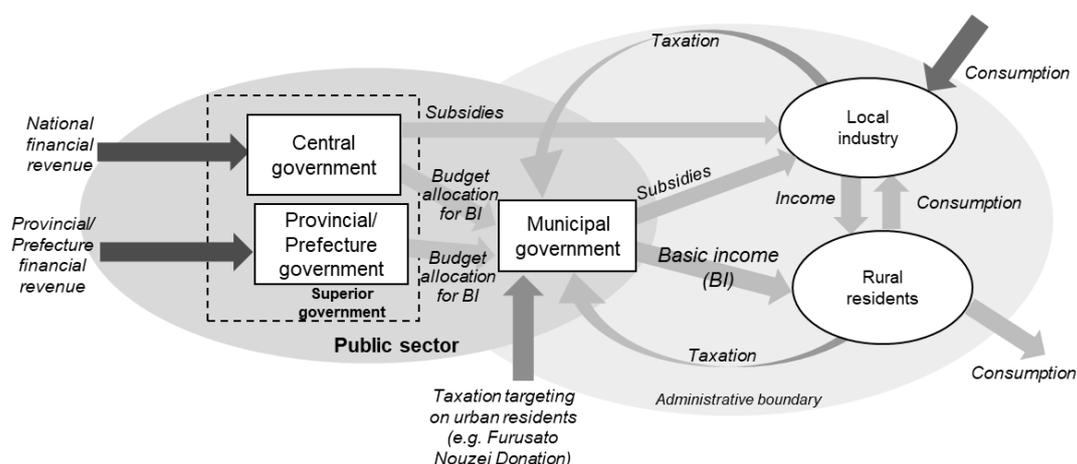


Figure 6-1 Potential mechanism on financing BI in the rural context

In summary, practical methods on financing BI in a certain rural area would compromise with reality and possibly be a combination of money from diverse sources. Nevertheless, it should be emphasized that vitalizing the local economy and developing local industries is a fundamental prerequisite to enhance the feasibility of implementing BI in the long run by contributing to securing its financial source.

6.3.3. Modification and innovation on the approach of BI in the practices

Finally, modification on the approach of BI may be required (at least at the initial phase of implementing BI) for compromising to the social, economic, cultural, and political context of implemented rural areas. Consequently, how BI is implemented as a formal policy, in reality, may differ from its original concept.

Considering the vision of the central government on rural revitalization both in China and Japan, the first modification is to allow the government to provide guidance on the use of BI to all the BI receivers. Despite there should be no interferences on the freedom of BI receivers to decide how the money to be spent, provision of the guidance on the use of BI accompany with its implementation could offer more options to the rural residents to wisely use their money while also in line with the interests of the government. One example is to attract BI receivers to spend their money on the investment in developing local industries. In China, the central government could even link BI with local economic development through a top-down approach by directly regulating that local residents should put part of the BI that they receive into the investment of local industries.

Furthermore, the form of BI could also be not limited to the cash in national currency. As BI implemented in rural areas is desired to be circulated rather than saved by rural residents, like what has been found in Ganzhou that the rural residents' traditional behaviors on saving may lead them not to spend BI. The solution then could be distributing BI in local currency or digital money settled with expire date.

6.4. Comparison of the feasibility of implementation of BI in rural areas between China and Japan

In China featured with a communist governance system, local governments have less local fiscal autonomy and more fiscal centralization. That is to say, local governments have no right to determine the establishment of new tax items or decide tax rates in their administrative boundaries. And their public finance is closely linked to the central government in many cases. Meanwhile, in Japan featured with a democratic government system, local governments have more local fiscal autonomy and less fiscal centralization. And also, they have the rights to negotiate with the central government to determine tax items or tax rates. However, at the same time, the public finance of the local government in a given municipality should be balanced by their own in many cases. The economy in rural areas featured with depopulation and aging society provides a limited potential to generate new financial revenue even by releasing new tax items or raising tax rates. Effective financial support from the central government would make it easier to finance a costly policy such as BI in a certain rural area.

Furthermore, in terms of the policymaking process, a communist governance system would allow establishing local-term policy plans (e.g. five-year national plan in the case of China). Citizens' willingness and opinions would be referenced but not directly determine the final decisions of the government. Meanwhile, in a democratic governance system, short-term policies might be easy to be determined predominantly based on the opinions of citizens. As BI is likely unable to generate economic benefits in a short-term period, its implementation requires a long-terms stable plan. Compared with a democratic governance system, a communist governance system would allow BI, which requires stable financial sources and would possibly lead to radical social and

economic changes of the entire society, to be more feasibly initiated and sustained in the long run.

Therefore, based on the above concerns, this study argued that compared with a democratic governance system, BI would be easier to be implemented in the rural context under a communist governance system. Moreover, based on the difference of governance system and the social-economic status, the proposals of BI in the rural context would vary between China and Japan. In China, top-down approaches and linkages between BI and local economic development should be emphasized in promoting the implementation of BI in rural areas. A BI proposal for all the local residents of all ages, such as scenario SG1 mentioned in Chapter 3 is considered proper for the context of rural China. This proposal is supposed to 1) contribute to boosting local economic growth, which is essential to ensure the financial source on BI from the local public finance, and to 2) motivate people to stay and work locally rather than going to urban areas for making a living. Meanwhile, in the rural context of Japan, the consensus-building among local residents is essential for ensuring the implementation of BI. As elder people want to stay in rural areas and in general prefer the current pension system than BI, the scenario SS3, mentioned in Chapter 3 giving BI only to people at working age without replacing pension may be suitable for rural Japan. This proposal may also eventually attract younger people living in urban areas to move to rural areas, as BI would be helpful for them to initiate their own business or achieve any other higher-level human needs in rural areas without worries about finding stable income sources for making a living.

Chapter 7. CONCLUSIONS

This research investigated the feasibility of implementing BI in the rural context, taking China and Japan as two case studies.

Three research objectives are shown as follows:

- 1) estimate the cost of implementing BI in the rural context at the municipal level,
- 2) investigating the attitudes of key stakeholders involved in the local policymaking process by surveying on the local public attitudes on BI in rural Japan and interviewing on the perception of local government in rural China
- 3) provide strategies on enhancing the feasibility of BI in the rural context in China and Japan corresponding to the opportunities and challenges embedded in the governance system and social-economics status of the two countries.

This research concludes that difficulties relevant to the local public finance and attitudes of stakeholders involved in the local policymaking process consequently hinder BI to be feasibly implemented as a local policy in rural areas both in China and Japan at present.

Chapter 3 addressed the objective 1 by estimating the cost of implementing BI in the rural context of China and Japan at the municipal level, taking rural Ganzhou and Sado as two case studies. Secondary data about the public finance of local government in rural Ganzhou and Sado were used for the cost estimation. Taking the adjustment on existing policies into consideration, it was estimated that the implementation of BI at present would annually cost 1.2 billion USD to 1.6 billion USD in rural Ganzhou. Meanwhile, the annual cost of implementing BI in Sado was estimated at from 231.0 million USD to 294.4 million USD. The result implies that if BI was currently

implemented in rural Ganzhou or Sado, a huge financial deficit would be created, which largely increases the public finance expenditure of the local government immediately. BI is argued not affordable merely based on the current capacity of local public finance in rural Ganzhou and Sado.

Chapter 4 and Chapter 5 aim to address the objective 2. Chapter 4 quantitatively investigated the public attitudes toward the implementation of BI and the factors influencing their attitudes in the context of rural Japan, taking the Hokuriku region as a case study. An online survey was conducted among 1,028 local residents in August 2019. Through cross-tabulation analysis and chi-square test, it is found that from the perspective of self-interest, the attitudes toward BI varied among the surveyed respondents with different age and income, family structure, interest in participating in non-market activities and employment status, due to concerns about the gains and loss from a trade-off selection between BI and existing policies it would replace. From the perspective of individual value, the public attitudes toward BI are significantly influenced by the perception of the future vision of society with BI. Binary opinions on this policy from the perspective of self-interest and individual value imply difficulties for consensus-building on its implementation among local residents. Chapter 4 further discussed the feasibility of the three BI scenarios proposed in Chapter 3 for the case of Sado, based on the findings about the factors influencing the public attitude toward BI in this chapter and the result about the calculation on the cost of BI in Chapter 3. It is argued that compared with the other two scenarios, the scenario 3 (SS3) giving all adult between 20 to 64 years old a full BI is likely more feasibly to be implemented due to a comprehensive consideration on the estimated cost for implementation and public attitudes toward this policy in Sado.

Chapter 5 investigated the attitudes of the local government in the rural context of China through qualitative approaches. Taking rural Ganzhou as an example, 4 interviews and 3 group discussions on officials of the local government of Ganzhou at different levels and a member of the Ganzhou political consultative conference were conducted during September 2019. The result from discourse analysis shows that the local government of Ganzhou considered that BI would potentially bring both positive and negative impacts on rural Ganzhou from the social, economic, and political perspectives. The general attitudes of the local government toward BI at present is interpreted not positive due to several constraints including the risk on the stability of rural society, controversial impacts on the rural economy, radical attributes of BI, limited financing capacity as well as limitation to initiate policy reform without authorization from the superior government. Key points for addressing the constraints above were proposed correspondingly.

Based on the findings from the previous chapters, Chapter 6 overall discusses the opportunities, challenges, and strategies on enhancing the feasibility of implementing BI in the rural context of China and Japan. BI and the existing national rural policy frameworks in each of the two countries are argued reciprocally interlinked with each other, which provides grounds for practically promoting the debates on the implementation of BI into policy agenda. However, limited public financial resources of local government and features of the policymaking process determine that BI is difficult to be initiated from grassroots as a local policy in the rural context under the existing governance system either in China or Japan. Correspondingly, a top-down approach from the national level is anticipated as a strategy to enhance the feasibility of the implementation of BI in rural context. Moreover, strengthening the development of

local economy and industries and diversifying fundraising methods are essential to secure the financial source on BI. Finally, modification and innovation on the approach of BI are also required in the practices which further expand the current BI definition. In Chapter 6, different BI proposals are also recommended for the rural context in China and Japan respectively, according to the difference of governance system and social-economic status in the two countries.

As the focus is on investigating whether BI is feasible to be implemented as a normal policy in a given rural context, whether what BI can potentially bring to the rural society could be in line with the interests and visions held by the stakeholders (e.g. rural residents, government) involved in the local policymaking process is a very fundamental question to be clarified for launching any promotion on the implementation of this innovative and radical approach in any given rural context. The key concern of any individual local resident would be whether the gain outweighs loss about the current benefits if BI is implemented with the replacement of the existing policies. In the meantime, from the perspective of government, the key concern on BI would likely be whether this radical and innovative approach could contribute to achieving the goals of rural development or revitalization designed by the government, and how BI could be sustainably financed. Therefore, identifying the connection between BI and interests of these stakeholders in any given rural context would provide a theoretical ground for the implementation of BI

Another principle is that the discussion on how BI could be implemented should not be in isolation with the features of any given context specifically including its economy, society, culture, and political system. According to the uniqueness of any given context, it may require different strategies on promoting the implementation of BI

as the difficulties faced are different. Sometimes the modification and innovation on the approach of BI are also necessary for compromising to the reality, especially at the initial phase of its implementation. And also, implementing BI in rural areas based on external supports, particularly in terms of securing financial sources, should be allowed at least in the initial phase.

Regarding the limitation of this study, the first one is considered that the case studies and scale for the calculation on the cost of BI are limited. The calculation on the cost of BI is expected to be applied in more case studies at the provincial/ prefecture-level in the future. Particularly in Japan, Sado was selected as one case study because this area is faced with rural depopulation, which implies a practical sense of discussing BI in this area for keeping the population. However, it cannot represent entire rural Japan. Compared with other rural areas in Japan, Sado, as an island, has more limitations on resources, energy, food, employment, and population. More rural areas with different social-economic status should be targeted in the future studies for further investigation on the feasibility of BI in the context of rural Japan. Second, the sample size of the survey for investigating public attitudes toward BI in the case of Japan is limited. Secondly, biases of the online survey might influence the representativeness of the respondents on the entire population in the surveyed region. Surveys with a larger sample size fully covering the social-demographic differences are expected in the future studies addressing this topic. Thirdly, behavior variables, such as whether receiving existing social benefits, may also affect one's attitude on BI but are not considered in the hypothesis of this study. The impacts of the above behavior variables on the public attitudes toward BI are expected to be investigated in the future studies. Finally, as an important topic contributing to the sustainability of the rural areas by addressing the

population migration, the investigation on the urban residents' attitudes toward BI and their willingness to migrate to rural areas where BI is implemented should be addressed in the future study.

Future studies are expected to focus on how BI could be sustained in the long term. An important topic is about the dynamics of BI cost after its implementation, which is possibly influenced by, for example, the change of population trend and the local economic scale. Furthermore, it is also essential to investigate whether the financial and capital market could be involved in the financing mechanism on BI by understanding their linkages. Finally, as the result turns out that the central government would also play an important role in determining the implementation of BI in rural areas, future studies should also focus on investigating and analyzing their attitude toward this policy.

REFERENCE

- Achterberg, W. (2002). From sustainability to basic income. In M. Kenny and J. Meadowcroft (Ed.), *Planning Sustainability* (pp. 138-157). New York: Routledge.
- Ackerman, B. A., Alstott, A., Van Parijs, P., & Wright, E. O. (2006). *Redesigning distribution: basic income and stakeholder grants as alternative cornerstones for a more egalitarian capitalism*. Verso Books.
- Altman, J., & Klein, E. (2018). Lessons from a basic income programme for Indigenous Australians. *Oxford Development Studies*, 46(1), 132-146.
- Andersson, J. O. (2009). Basic income from an ecological perspective. *Basic Income Studies*, 4(2).
- Andersson, J.O. & Kangas, O. (2002) Popular support for basic income in Sweden and Finland. Proceedings of *Basic Income European Network 9th International Congress, Geneva, Austria, 12 to 14 September 2002*. Retrieved from: <https://basicincome.org/bien/pdf/2002AnderssonKangas.pdf>. (accessed on 26 January 2017)
- Atkinson, A. B. (1996). The case for a participation income. *The Political Quarterly*, 67(1), 67-70.
- Atkinson, A. B. (2014). After Piketty? *British Journal of Sociology*, 65(4), 619-638.
- Baker, J. (1992). An egalitarian case for basic income. In P. Van Parijs, (Ed.), *Arguing for Basic Income: Ethical Foundations for a Radical Reform*. Verso.
- Baker, J. (2008). All things considered, should feminists embrace basic income? *Basic Income Studies*, 3(3).
- Banerjee, A., Niehaus, P., & Suri, T. (2019). Universal basic income in the developing world. *Annual Review of Economics*. 11(1), 959-983.
- Barchiesi, F. (2007). South African debates on the basic income grant: Wage labor and the post-apartheid social policy. *Journal of Southern African Studies*, 33(3), 561-575.
- Basic Income Earth Network (No date). Retrieved from: <https://basicincome.org/basic-income/> (accessed on 3 February, 2020)
- Battistoni, A. (2017). The False Promise of Universal Basic Income. *Dissent*, 64(2), 52-62, doi:10.1353/dss.2017.0030.
- Baulant, C. (2017). Rethinking the Links between Human Relationships and Economic Efficiency Using Local Institutions: The Case of Two Emerging Economies. *Journal of Economic Issues*, 51(3), 651-662.

- Bay, A. H., & Pedersen, A. W. (2006). The limits of social solidarity: Basic income, immigration and the legitimacy of the universal welfare state. *Acta Sociologica*, 49(4), 419-436.
- Beck, S., Pulkki-Brannstrom, A. M., & San Sebastian, M. (2015). Basic income - healthy outcome? Effects on health of an Indian basic income pilot project: a cluster randomised trial. *Journal of Development Effectiveness*, 7(1), 111-126.
- Bergmann, B. R. (2004). A Swedish-style welfare state or basic income: Which should have priority? *Politics & Society*, 32(1), 107-118.
doi:10.1177/0032329203261101
- Berman, M. (2018). Resource rents, universal basic income, and poverty among Alaska's Indigenous peoples. *World Development*, 106, 161-172.
- Bijker, R. A., Haartsen, T., & Strijker, D. (2012). Migration to less-popular rural areas in the Netherlands: Exploring the motivations. *Journal of Rural Studies*, 28(4), 490-498. doi:https://doi.org/10.1016/j.jrurstud.2012.07.003
- Bill, J. (1988). The Prospects for Basic Income. *Social Policy & Administration*, 22(2), 115-123.
- Birnbaum, S. (2009). Introduction: Basic income, sustainability and post-productivism. *Basic Income Studies*, 4(2).
- Birnbaum, S. (2011). Should surfers be ostracized? Basic income, liberal neutrality, and the work ethos. *Politics Philosophy & Economics*, 10(4), 396-419.
doi:10.1177/1470594x10386569
- Boso, Á., & Vancea, M. (2012). Basic income for immigrants? The pull effect of social benefits on migration. *Basic Income Studies*, 7(1).
- Burtless, G., & Hausman, J. A. (1978). The Effect of Taxation on Labor Supply: Evaluating the Gary Negative Income Tax Experiment. *Journal of Political Economy*, 86(6), 1103-1130.
- Cabinet Office of Japanese Government (No Date). *Society 5.0*. Retrieved from: https://www8.cao.go.jp/cstp/english/society5_0/index.html (accessed on 3 June 2020)
- Cabinet Office of Japanese Government (2019). *General Strategy for Overcoming Population Decline and Vitalizing Local Economy in Japan (Second Phase) 第2期「まち・ひと・しごと創生総合戦略」*. Retrieved from <https://www.kantei.go.jp/jp/singi/sousei/info/pdf/r1-12-20-senryaku.pdf> (accessed on 2 March 2020)
- Calder, G. (2009). Mobility, Inclusion and the Green Case for Basic Income. *Basic Income Studies*, 4(2).

- Calnitsky, D., & Latner, J. P. (2017). Basic Income in a Small Town: Understanding the Elusive Effects on Work. *Social Problems*, 64(3), 373-397.
- Cantillon, S., & McLean, C. (2016). Basic income guarantee: The gender impact within households. *Journal of Sociology & Social Welfare*, 43(3), 97-120.
- Caputo, R. K., & Lewis, M. (2016). Introduction to the Symposium on The Basic Income Guarantee. *Journal of Sociology & Social Welfare*, 43(3), 3-8.
- Casassas, D., & De Wispelaere, J. (2012). The Alaska model: a republican perspective In K. Widerquist & M. Howard (Ed.), *Alaska's permanent fund dividend: examining its suitability as a model* (pp. 169-188). New York: Palgrave Macmillan.
- Chang, H., Dong, X., & MacPhail, F. (2011). Labor migration and time use patterns of the left-behind children and elderly in rural China. *World Development*, 39(12), 2199-2210.
- Chen, Y. A., & Quinonez, C. (2018). Basic income guarantee: a review of implications for oral health. *Journal of public health dentistry*, 78(1), 56-62.
- China National Bureau of Statistics. (2006). *统计上划分城乡的规定. (Rules for defining urban and rural areas from the perspective of statistics)*. Retrieved from http://www.stats.gov.cn/tjsj/tjbz/200610/t20061018_8666.html (accessed on 12 April 2020)
- Chinese Government (2005). *Agricultural tax regulation of China 1958*. Retrieved from: http://www.gov.cn/banshi/2005-08/19/content_24853.htm (accessed on 1 September 2019)
- Chinese Government (2016a). *国务院关于推进中央与地方财政事权和支出责任划分改革的指导意见 (Guiding opinions of the State Council on advancing the reform of the division of financial powers and expenditure responsibility between the central and the local governments)*. Retrieved from: http://www.gov.cn/zhengce/content/2016-08/24/content_5101963.htm (accessed on 31 August 2019)
- Chinese Government (2016b). *国务院关于印发“十三五”脱贫攻坚规划的通知. (Announcement of the State Council on the plan of poverty reduction during the 13th five-year plan)*. Retrieved from: http://www.gov.cn/zhengce/content/2016-12/02/content_5142197.htm (accessed on 31 August 2019)
- Chinese Government. (2016c). *The 13th five-year plan for economic and social development of the people's republic of China (2016-2020)*. Retrieved from: https://en.ndrc.gov.cn/policyrelease_8233/201612/P020191101482242850325.pdf

- f (accessed on 26 February 2020)
- Chinese Government. (2018). *The guideline on “winning the battle against poverty”*. Retrieved from http://www.gov.cn/zhengce/2018-08/19/content_5314959.htm (accessed on 26 February 2020)
- Chinese National Bureau of Statistics (2020). *中国城乡人口统计数据 1960-2015. (Statistic data of Chinese urban and rural population 1960-2015)* Retrieved from: <http://data.stats.gov.cn/easyquery.htm?cn=C01&zb=A0301&sj=2019> (accessed on 5 April 2020)
- Chung, W., Ha, H., & Kim, B. (2016). Money transfer and birth weight: evidence from the alaska permanent fund dividend. *Economic Inquiry*, 54(1), 576-590.
- Clark, C. M. A. (2003). Promoting Economic Equity: The Basic Income Approach. In M. R. Tool & P. D. Bush (Eds.), *Institutional Analysis and Economic Policy* (pp. 133-156). Boston, MA: Springer US.
- Clark, C. M., & Kavanagh, C. (1996). Basic income, inequality, and unemployment: rethinking the linkage between work and welfare. *Journal of Economic Issues*, 30(2), 399-406.
- Colin, F. (1999). Justice and a Citizens' Basic Income. *Journal of Applied Philosophy*, 16(3), 283-296.
- Colini, L. (2018). *The B-MINCOME Project Journal N°2: Money for whom?* Retrieved from: <http://basicincome.org/news/2017/10/overview-of-current-basic-income-related-experiments-october-2017/>. (accessed on 20 June 2018)
- Cook, F. L., & Barrett, E. J. (1988). Public support for social security. *Journal of Aging Studies*, 2(4), 339-356.
- Cristian, P. M. (2017). What Is Wrong with Conditional Cash Transfer Programs? *Journal of Social Philosophy*, 48(4), 440-460.
- Cruz-Saco, M. (2002). A basic income policy for Peru: Can it work. *Proceedings of Basic Income European Network 9th International Congress*. Retrieved from: <https://basicincome.org/bien/pdf/2002Cruz-Saco.pdf>. (Accessed on 30 August 2017)
- Cunliffe, J., & Erreygers, G. (2003). 'Basic income? Basic capital!' Origins and issues of a debate. *Journal of Political Philosophy*, 11(1), 89-110.
- Davala, S., Jhabvala, R., Standing, G., & Mehta, S. K. (2015). *Basic income: A transformative policy for India*. London: Bloomsbury Publishing.
- Davies, S., & Bregman, R. (2017). Basic income, labor, and the idea of post-capitalism. *Economic Affairs*, 37(3), 442-458.

- de Brauw, A., Gilligan, D. O., Hoddinott, J., & Roy, S. (2015). The Impact of Bolsa Família on Schooling. *World Development*, 70, 303-316.
- De Wispelaere, J., & Stirton, L. (2004). The many faces of universal basic income. *Political Quarterly*, 75(3), 266-274.
- De Wispelaere, J., & Stirton, L. (2007). The public administration case against participation income. *Social Service Review*, 81(3), 523-549.
- De Wispelaere, J., & Stirton, L. (2011). The administrative efficiency of basic income. *Policy and Politics*, 39(1), 115-132.
- De Wispelaere, J., & Stirton, L. (2017). When Basic Income Meets Professor Pangloss: Ignoring Public Administration and Its Perils. *Political Quarterly*, 88(2), 298-305.
- Dworkin, R. (1981). What is Equality? Part 2: Equality of Resources. *Philosophy & Public Affairs*, 10(4), 283-345.
- Elgarte, J. M. (2008). Basic income and the gendered division of labor. *Basic Income Studies*, 3(3).
- Evans, P. M. (2009). Lone mothers, workfare and precarious employment: time for a Canadian basic income? *International Social Security Review*, 62(1), 45-63.
- Evans, W. N., & Moore, T. J. (2011). The short-term mortality consequences of income receipt. *Journal of public economics*, 95(11-12), 1410-1424.
- Ferguson, J. (2010). The Uses of Neoliberalism. *Antipode*, 41, 166-184.
- Fitzpatrick, T. (2005). The fourth attempt to construct a politics of welfare obligations. *Policy and Politics*, 33(1), 15-32.
- Fitzpatrick, T. (2011). Social paternalism and basic income. *Policy & Politics*, 39(1), 83-100.
- Fitzpatrick, T. (2013). Ecologism and Basic Income. In K. Widerquist, J. A. Noguera, Y. Vanderborght, & J. De Wispelaere (Eds.), *Basic income: an anthology of contemporary research* (pp. 263-267). Blackwell Publishing.
- Forget, E. L. (2011). The Town with No Poverty: The Health Effects of a Canadian Guaranteed Annual Income Field Experiment. *Canadian Public Policy-Analyse De Politiques*, 37(3), 283-305.
- Forget, E. L., Peden, A., & Strobel, S. (2013). Cash transfers, basic income and community building. *Social Inclusion*, 1(2), 84-91.
- Fukushi, K., & Takeuchi, K. (2011). Multifaceted aspects of sustainability science. In H. Komiyama, K. Takeuchi, H. Shiroyama, & T. Mino (Eds.), *Sustainability Science: A Multidisciplinary Approach* (pp. 112-116). New York: United Nations.
- Ganzhou City Government (2016). *Ganzhou yearbook 2016*. China Statistics Press.

- Ganzhou City Government (2017). *Ganzhou yearbook 2017*. China Statistics Press.
- Garfinkel, I., Huang, C. C., & Naidich, W. (2006). The effects of a basic income guarantee on poverty and income distribution. In B. Ackerman, A. Alstott, P. Van Parijs (Ed.), *Redesigning Distribution: basic income and stakeholder grants as alternative cornerstones for a more egalitarian capitalism (The real Utopias Project)* (pp. 117-141). Verso.
- Gheaus, A. (2008). Basic income, gender justice and the costs of gender-symmetrical lifestyles. *Basic Income Studies*, 3(3).
- Glewwe, P., & Kassouf, A. L. (2012). The impact of the Bolsa Escola/Familia conditional cash transfer program on enrollment, dropout rates and grade promotion in Brazil. *Journal of development Economics*, 97(2), 505-517.
- Goldsmith, S. (2001). The Alaska permanent fund dividend program. Proceedings of conference on *Alberta: Government Policies in a Surplus Economy*. Retrieved from:
https://iseralaska.org/static/legacy_publication_links/presentations/AK_PFD_Program.pdf. (Accessed on 26 January 2017)
- Goldsmith, S. (2002). The Alaska Permanent Fund Dividend: an experiment in wealth distribution. Proceedings of *Basic Income European Network 9th International Congress*. Retrieved from: <https://basicincome.org/bien/pdf/2002Goldsmith.pdf>. (Accessed on 26 January 2017)
- Google map. (No Date) Retrieved from: <https://www.google.co.jp/maps/?hl=ja> (accessed date: 2020. April 20th)
- Groscurth, H. M. (1998). Elements of a policy for more labor and more environmental protection. *Ecological Economics*, 27(3), 237-242.
- Haagh, L. (2015). Alternative social states and the basic income debate: institutions, inequality and human development. *Basic Income Studies*, 10(1), 45-81.
- Haarmann, C., Haarmann, D., Haarmann, D., Jauch, H., Shindondola-Mote, H., Natrass, et al. (2009 April). *Making the difference!: the BIG in Namibia: Basic Income Grant pilot project assessment report*. Retrieved from:
http://www.bignam.org/Publications/BIG_Assessment_report_08b.pdf. (accessed on 18 January 2018).
- Harvey, P. (2005). Right to Work and Basic Income Guarantees: Competing or Complementary Goals. *Journal of Law & Urban Policy*, 2(1), 8-63.
- Hasenfeld, Y., & Rafferty, J. A. (1989). The determinants of public attitudes toward the welfare state. *Social Forces*, 67(4), 1027-1048.
- Hausman, J. A., & Wise, D. A. (1976). The evaluation of results from truncated samples:

- The New Jersey income maintenance experiment. In S. V. Berg (Ed.). *Annals of Economic and Social Measurement, Volume 5, number 4* (pp. 421-445). National Bureau of Economic Research.
- Hiroya, M. (2015). To avoid the emergence of a polarized society: The study of population concentration to Tokyo and declining population issue in Japan. *The Japanese journal of real estate sciences, 29*(2), 8. (in Japanese)
- Home page of eight. (No Date). world. <http://eight.world/?p=850>. (Accessed on 14 Jan 2018)
- Homepage of the Federal Chancellery of Switzerland. (No Date)
<https://www.bk.admin.ch/ch/d/pore/va/20160605/det601.html>. (accessed on 19 March 2020).
- Hornborg, A. (2017). How to turn an ocean liner: a proposal for voluntary degrowth by redesigning money for sustainability, justice, and resilience. *Journal of Political Ecology, 24*, 623-632.
- Howard, M. W. (2005). Basic income, liberal neutrality, socialism, and work. *Review of Social Economy, 63*(4), 613-631.
- Hsieh, C. T. (2003). Do consumers react to anticipated income changes? Evidence from the Alaska permanent fund. *American Economic Review, 93*(1), 397-405.
- Hughes, J. (2014). A strategic opening for a basic income guarantee in the global crisis being created by AI, robots, desktop manufacturing and biomedicine. *Journal of Evolution and Technology, 24*(1), 45-61.
- Ida, M. (2000). Nihon Jin No Seiji Syakaikan Ni Kansuru Kousatsu Jiko Sekinin to Fukushikokka Ni Tsuite (Consideration on the views of Japanese on politics and society: Own responsibility and welfare state). *The Review of Economics and Political Science, 69*(2-3), 213-253.
- Ilcan, S., & Lacey, A. (2015). Enacting the Millennium Development Goals: Political Technologies of Calculation and the Counter-calculation of Poverty in Namibia. *Globalizations, 12*(4), 613-628.
- Jackson, A. (2017). Basic income: A social democratic perspective. *Global Social Policy, 17*(1), 101-104.
- Japan Ministry of Health, Labor and Welfare (2017). *Annual Report on Monthly Labor Survey*. Retrieved from:
https://www.e-stat.go.jp/stat-search/files?page=1&layout=datalist&toukei=00450071&tstat=000001011791&cycle=7&year=20170&month=0&tclass1=000001015954&result_back=1. (accessed on 23 December 2019).
- Japan Ministry of Health, Labor and Welfare (2017). *Annual Report on Welfare Pension*

- and National Pension. Retrieved from:
https://www.e-stat.go.jp/stat-search/files?page=1&layout=datalist&toukei=00450463&tstat=000001064713&cycle=8&month=0&tclass1=000001129735&cycle_facet=cycle. (accessed on 30 November 2019).
- Japan Ministry of Health, Labor and Welfare (2018). *Basic survey on wage structure*. Retrieved from:
<https://www.e-stat.go.jp/stat-search/files?page=1&layout=datalist&toukei=00450091&tstat=000001011429&cycle=0&tclass1=000001113395&tclass2=000001113397&tclass3=000001113406>. (accessed on 13 November 2019).
- Japan Ministry of Land, Infrastructure and Tourism (2015). *White Paper of Land, Infrastructure and Transport 2015*. Retrieved from
<https://www.mlit.go.jp/hakusyo/mlit/h26/hakusho/h27/pdf/np101200.pdf>
- Japan Trade Union Confederation (2015). *Survey about Working Time*. Retrieved from:
<https://www.jtuc-rengo.or.jp/info/chousa/data/20150116.pdf>. (accessed on 24 December 2019).
- Jauch, H. (2015). The Rise and Fall of the Basic Income Grant Campaign: Lessons from Namibia. *Global Labor Journal*, 6(3), 336-350.
- JICA. (2009). 中華人民共和国農村社会養老保険制度整備調査最終報告書 (*Report of investigation on improvement of the rural social pension system in the People's Republic of China*). Retrieved from:
http://open_jicareport.jica.go.jp/pdf/11919081_01.pdf (accessed on 31 August 2019)
- Jordan, B. (2012). The Low Road to Basic Income? Tax-Benefit Integration in the UK. *Journal of Social Policy*, 41, 1-17.
- Jordan, B. (2012). The low road to basic income? Tax-benefit integration in the UK. *Journal of Social Policy*, 41(1), 1-17.
- Jörimann, A. (2017). Financing Basic Income in Switzerland, and an Overview of the 2016 Referendum Debates. In R. Pereira (Ed.), *Financing Basic Income: Addressing the Cost Objection* (pp. 49-74). Cham: Springer International Publishing.
- Kalantaridis, C., & Bika, Z. (2006). In-migrant entrepreneurship in rural England: beyond local embeddedness. *Entrepreneurship and Regional Development*, 18(2), 109-131.
- Kallis, G. (2011). In defence of degrowth. *Ecological Economics*, 70(5), 873-880. doi: 10.1016/j.ecolecon.2010.12.007
- Kangas, O. E. (1995). Attitudes on means-tested social benefits in Finland. *Acta*

- Sociologica*, 38(4), 299-310.
- Kangas, O., Jauhiainen S., Simanainen, M., Ylikännö M. (2019). *The Basic Income Experiment 2017–2018 in Finland. Preliminary results*. Retrieved from: http://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/161361/Report_The%20Basic%20Income%20Experiment%2020172018%20in%20Finland.pdf?sequence=1&isAllowed=y. (accessed on 7 March 2019)
- Kangas, O., Simanainen, M., & Honkanen, P. (2017). Basic Income in the Finnish Context. *Intereconomics*, 52(2), 87-91.
- Kela (2016). *From idea to experiment Report on universal basic income experiment in Finland*. Retrieved from: <https://helda.helsinki.fi/bitstream/handle/10138/167728/WorkingPapers106.pdf?sequence=4>. (accessed on 14 February 2018)
- Kela (2018). *Basic income: Amount and payment*. Retrieved from: <http://www.kela.fi/web/en/basic-income-amount-and-payment>. (accessed on 14 January 2018)
- Koistinen, P., & Perkiö, J. (2014). Good and bad times of social innovations: the case of Universal basic income in Finland. *Basic Income Studies*, 9(1-2), 25-57.
- Krozer, A. (2010). *A regional basic income: towards the eradication of extreme poverty in Central America*. Retrieved from: <https://repositorio.cepal.org/bitstream/handle/11362/25938/1/lcmex1998.pdf>. (accessed on 19 January 2018)
- Lacey, A. (2017). Universal basic income as development solution? *Global Social Policy*, 17(1), 93-97.
- Lee, S. (2018). Attitudes toward universal basic income and welfare state in Europe: A research note. *Basic Income Studies*, 13(1).
- Lee, Y.-J., & Sugiura, H. (2018). Key Factors in Determining Internal Migration to Rural Areas and Its Promoting Measures? A Case Study of Hirosaki City, Aomori Prefecture. *Public Policy Review*, 14(1), 153-176.
- Li, T. M. (2011). Centering labor in the land grab debate. *Journal of Peasant Studies*, 38(2), 281-298.
- Linos, K., & West, M. (2003). Self-interest, social beliefs, and attitudes to redistribution. Re-addressing the issue of cross-national variation. *European Sociological Review*, 19(4), 393-409.
- Liu, Y. & Liu Yu (2010). Progress and prospect on the study of rural hollowing in China. *Geographical Research*, 29(1), 35-42.
- Lovett, F. (2009). Domination and Distributive Justice. *Journal of Politics*, 71(3),

817-830.

- Makino, K. (2004). *Social security policy reform in post-apartheid South Africa: A focus on the Basic Income Grant*. Center for Civil Society Research Report, No.11., Centre for Civil Society Durban. Retrieved from: <http://ccs.ukzn.ac.za/files/Report%2011.pdf>. (accessed on 11 February 2017)
- Maskivker, J. (2010). An alternative reply to the free-rider objection against unconditional citizenship grants. In J. Boston, A. Bradstock, D. Eng (Ed.), *Public Policy Why ethics matters* (pp. 257-276). ANU Press.
- Maslow, A. H. (1958). A Dynamic Theory of Human Motivation Understanding human motivation. (pp. 26-47). Cleveland, OH, US: Howard Allen Publishers.
- Mays, J. M. (2016). Countering disablism: an alternative universal income support system based on egalitarianism. *Scandinavian Journal of Disability Research*, 18(2), 106-117.
- McFarland, K. (2016a). *BRAZIL: Basic Income Startup gives “lifetime basic incomes” to villagers*. Retrieved from: <http://basicincome.org/news/2016/12/brazil-basic-income-startup-gives-lifetime-basic-incomes-villagers/>. (accessed on 14 January 2018)
- McFarland, K. (2016b). *UGANDA: Two-year basic income pilot set to launch in 2017*. Retrieved from: <http://basicincome.org/news/2016/11/uganda-two-year-basic-income-pilot-set-to-launch-in-2017/>. (accessed on 14 January 2018)
- McFarland, K. (2017). *Current Basic Income Experiments (and those so called): An Overview*. Retrieved from: <http://basicincome.org/news/2017/05/basic-income-experiments-and-those-so-called-early-2017-updates/>. (accessed on 14 January 2018)
- McFarland, K. (2017). *Overview of Current Basic Income Related Experiments*. Retrieved from: <http://basicincome.org/news/2017/10/overview-of-current-basic-income-related-experiments-october-2017/>. (accessed on 14 January 2018)
- McKay, A. (2001). Rethinking work and income maintenance policy: Promoting gender equality through a citizens' basic income. *Feminist Economics*, 7(1), 97-118.
- McKay, A., & Vanevery, J. (2000). Gender, family, and income maintenance: a feminist case for citizens basic income. *Social Politics: International Studies in Gender, State & Society*, 7(2), 266-284.
- McLeod, S. (2018). Maslow's Hierarchy of Needs Simply Psychology. Retrieved from: <https://www.simplypsychology.org/maslow.html> (accessed on 24 March 2020)

- Ministry of Agriculture, Forestry and Fisheries of Japan. (No date) *Terminology about agricultural areas*. Retrieved from https://www.maff.go.jp/j/tokei/chiiki_ruikei/setsumei.html. (accessed on 31 August 2019)
- Ministry of Health, Labor and Welfare of Japan. (2011). *Annual Health, Labor and Welfare Report 2011*. Retrieved from: <https://www.mhlw.go.jp/wp/hakusyo/kousei/12/dl/1-03.pdf>.
- Ministry of Health, Labor and Welfare of Japan (No date). Monthly report of Pension at the municipal level (As of March 2018). Retrieved from: <https://www.mhlw.go.jp/topics/bukyoku/nenkin/nenkin/toukei/sikutyouson.html> (accessed on 20 April 2020)
- Ministry of Land, Infrastructure, Transport and Tourism of Japan (No date). *An overview of spatial policy in Asian and European countries*. Retrieved from: https://www.mlit.go.jp/kokudokeikaku/international/spw/general/china/index_e.html (accessed on 26 February 2020)
- Mitchell, W., & Watts, M. (2005). A comparison of the macroeconomic consequences of basic income and job guarantee schemes. *Journal of Law & Urban policy*, 2(1), 64-90.
- Moffitt, R. (1992). Incentive effects of the united-states welfare system - A review. *Journal of Economic Literature*, 30(1), 1-61.
- Molander, A., & Torsvik, G. (2015). Getting people into work: what (if anything) can justify mandatory activation of welfare recipients? *Journal of Applied Philosophy*, 32(4), 373-392.
- National Bureau of Statistic of China. (2017) *China Statistic Yearbook 2017*. Retrieved from <http://www.stats.gov.cn/tjsj/ndsj/2017/indexeh.htm>. (accessed on 31 August 2019)
- National Bureau of Statistics of China. (2018). *China Statistic Yearbook 2018*. Retrieved from <http://www.stats.gov.cn/tjsj/ndsj/2018/indexeh.htm>. (accessed on 20 April 2020)
- National Bureau of Statistics of China (No date). Statistic information. Retrieved from: <http://data.stats.gov.cn/> (accessed on 7 April 2020)
- National Tax Agency of Japan (2017). *Statistical survey of actual status for salary in the private sector*. Retrieved from: <https://www.nta.go.jp/publication/statistics/kokuzeicho/minkan2017/pdf/000.pdf> (accessed on 28 November 2019).
- National Tax Agency of Japan (No date). 統計情報 (*Statistic information*). Retrieved

- from: <https://www.nta.go.jp/about/organization/kantoshinetsu/statistics/index.htm>
(accessed on 7 March 2019)
- Nattrass, N. (2006). Trading off income and health?: AIDS and the disability grant in South Africa. *Journal of Social Policy*, 35(1), 3-19.
- Nelson, P. B. (1999). Quality of life, nontraditional income, and economic growth. *Rural Development Perspectives*, 14(2), 32-37.
- Niigata Labor Bureau (2017). *Monthly report of labor market in Niigata 2017*. Retrieved from: https://jsite.mhlw.go.jp/niigata-hellowork/kakushu_jouhou/chingin_toukei/koyou.html (accessed on 28 October 2018)
- Niigata Prefecture Government (2017). *Statistic yearbook of Niigata Prefecture 2017*. Retrieved from: <http://www.pref.niigata.lg.jp/tokei/1356889528368.html> (accessed on 22 October 2018)
- Noguera, J. A. (2005). Citizens or Workers-Basic Income vs. Welfare-to-Work Policies. *Journal of Law & Urban Policy*, 2(1), 103.
- Nooteboom, B. (1987). Basic income as a basis for small business. *International Small Business Journal*, 5(3), 10-18.
- OECD. (2011). *OECD regional terminology*. Retrieved from https://www.oecd.org/cfe/regional-policy/OECD_regional_typology_Nov2012.pdf
- Ontario Government. *Ontario Basic Income Pilot*. Retrieved from: <https://www.ontario.ca/page/ontario-basic-income-pilot#section-4>. (accessed on 14 January 2018)
- Opielka, M. (2008). The likelihood of a basic income in Germany. *International Social Security Review*, 61(3), 73-94.
- O'Reilly, J. (2008). Can a basic income lead to a more gender equal society? *Basic Income Studies*, 3(3).
- Pasma, C. (2014). *Basic Income Programs and Pilots*. Retrieved from: http://www.niagaraknowledgeexchange.com/wp-content/uploads/sites/2/2014/05/Basic_Income_Programs_and_Pilots.pdf. (accessed on 18 January 2018)
- Pateman, C. (2004). Democratizing citizenship: Some advantages of a basic income. *Politics & Society*, 32(1), 89-105.
- Pereira, R. (2017). *Financing Basic Income: Addressing the Cost Objection*: Springer International Publishing.
- Pereira, R. (2017). Introduction: Financing approaches to basic income. In *Financing Basic Income* (pp. 1-5). Palgrave Macmillan, Cham.

- Perkiö, J. (2012). The Struggle over interpretation: Basic income in the Finnish public discussion in 2006-2012. Proceedings of *the 14th Basic Income Earth Network Congress*. Retrieved from:
<https://basicincome.org/bien/pdf/munich2012/perkio.pdf>. (accessed on 26 January 2017)
- Perkiö, J. (2013). *Basic income proposals in Finland, Germany and Spain*. Retrieved from:
https://www.transform-network.net/fileadmin/_migrated/news_uploads/paper__2__13.pdf. (accessed on 18 January 2018)
- Perkiö, J. (2015). *Universal basic income – A new tool for development policy?* Retrieved from:
<https://sange.fi/kvsolidaarisuustyö/wp-content/uploads/Universal-Basic-Income-A-New-Tool-for-Development-Policy.pdf>. (accessed on 17 January 2018)
- Permanent Fund Dividend Division, Alaska Department of Revenue. (no Date)
 Retrieved from: <https://pfd.alaska.gov/Payments/Tax-Information>. (accessed on 01 January 2018)
- Peterson, J. L., & Petersen, C. D. (1994). Single mother families and the dual welfare state. *Review of Social Economy*, 52(3), 314-338.
- Pettit, P. (1993). Liberalism and republicanism. *Australian Journal of Political Science*, 28(4), 162-189.
- Pettit, P. (2008). A republican right to basic income? *Basic Income Studies*, 2(2), 1-8.
- Powe, N. (2007). *Market Towns: Roles, Challenges and Prospects*: Taylor & Francis.
- Pulkka, V. V. (2017). A free lunch with robots - can a basic income stabilize the digital economy? *Transfer-European Review of Labor and Research*, 23(3), 295-311.
 doi:10.1177/1024258917708704
- Qin, B., & Zhang, Y. (2014). Note on urbanization in China: Urban definitions and census data. *China Economic Review*, 30, 495-502.
 doi:<https://doi.org/10.1016/j.chieco.2014.07.008>
- Raventós, D. (2007). *Basic income: The material conditions of freedom*. London: Pluto Press.
- Rawls, J. (1988). The priority of right and ideas of the good. *Philosophy & Public Affairs*, 17(4), 251-276.
- Rawls, J. (2009). *A theory of justice*. Cambridge: Harvard university press.
- ReCivitas (2012). *Analytical report of three years of the pilot-project of basic income guarantee in Quatinga Velho*. Retrieved from: <http://www.recivitas.org/publicaes>. (accessed on 14 February 2018)

- Richter, L. M., Sherr, L., Adato, M., Belsey, M., Chandan, U., Desmond, C., et al. (2009). Strengthening families to support children affected by HIV and AIDS. *Aids Care-Psychological and Socio-Medical Aspects of Aids/Hiv*, 21(S1), 3-12.
- Robeyns, I. (2001). Will a basic income do justice to women? *Analyse & Kritik*, 23(1), 88-105.
- Robins, P. K. (1985). A comparison of the labor supply findings from the 4 negative income-tax experiments. *Journal of Human Resources*, 20(4), 567-582.
doi:10.2307/145685
- Rogers, E.M.(2010) *Diffusion of Innovations* (4th ed) Free Press: New York, the United States.
- Ruckert, A., Huynh, C., & Labonte, R. (2018). Reducing health inequities: is universal basic income the way forward? *Journal of public health*, 40(1), 3-7.
- Sado City Government (2015). *General Strategies of Overcoming Population Decline and Vitalizing Local Economy in Sado City (Sado-Shi Machi Hito Shigoto Sousei Sougou Senryaku)*. Retrieved from:
https://www.city.sado.niigata.jp/topics/p_comm/pdf2015/02_1.pdf (accessed on 31 August 2019)
- Sado City Government (2016). Overview of the municipal administration of Sado 2016. Retrieved from:
<https://www.city.sado.niigata.jp/admin/budget/pdf/bud2016/whole.pdf> (accessed on 18 April 2020)
- Sado City Government (2018). *Budget document 2018*. Retrieved from:
https://www.city.sado.niigata.jp/admin/budget/pdf/2018_budget/01.pdf
- Salkind, N. J., & Haskins, R. (1982). Negative income-tax - the impact on children from low-income families. *Journal of Family Issues*, 3(2), 165-180.
- Schneider, F., Kallis, G., & Martinez-Alier, J. (2010). Crisis or opportunity? Economic degrowth for social equity and ecological sustainability. Introduction to this special issue. *Journal of cleaner production*, 18(6), 511-518.
- Schneider, F., Kallis, G., & Martinez-Alier, J. (2010). Crisis or opportunity? Economic degrowth for social equity and ecological sustainability. Introduction to this special issue. *Journal of cleaner production*, 18(6), 511-518.
- Schulz, P. (2017). Universal basic income in a feminist perspective and gender analysis. *Global Social Policy*, 17(1), 89-92.
- Seekings, J. (2002). The broader importance of welfare reform in South Africa. *Social Dynamics-a Journal of African Studies*, 28(2), 1-38.
- Sessa, C., & Ricci, A. (2014). The world in 2050 and the New Welfare scenario. *Futures*,

58, 77-90.

- Simoes, A. A., & Sabates, R. (2014). The Contribution of Bolsa Família to the educational achievement of economically disadvantaged children in Brazil. *International Journal of Educational Development*, 39, 141-156.
- Simpson, W., Mason, G., & Godwin, R. (2017). The Manitoba Basic Annual Income Experiment: Lessons Learned 40 Years Later. *Canadian Public Policy-Analyse De Politiques*, 43(1), 85-104.
- Sircar, N. R., & Friedman, E. A. (2018). Financial security and public health: How basic income & cash transfers can promote health. *Global Public Health*, 13(12), 1878-1888.
- Soares, F. V. (2011). Brazil's Bolsa Família: A Review. *Economic and Political Weekly*, 46(21), 55-60.
- Soares, F. V., Ribas, R. P., & Osório, R. G. (2010). Evaluating the impact of Brazil's Bolsa Família: Cash transfer programs in comparative perspective. *Latin American Research Review*, 45(2), 173-190.
- Song, Y. (2016). Is the countryside really falling behind under the tide of urbanization?. *Urban and Environmental Studies*, (3), 3-19.
- Standing, G. (2004). Income security: Why unions should campaign for a basic income. *Transfer: European Review of Labor and Research*, 10(4), 606-619.
- Standing, G. (2005). Why basic income is needed for a right to work. *Journal of Law & Urban Policy*, 2(1), 91-102.
- Standing, G. (2008). How cash transfers promote the case for basic income. *Basic Income Studies*, 3(1).
- Standing, G. (2012). The Precariat: From Denizens to Citizens? *Polity*, 44(4), 588-608.
- Standing, G. (2013). Why a basic income is necessary for a right to work. *Basic Income Studies*, 7(2), 19-40.
- Statistics Bureau of Japan (2012). *Employment Status survey 2012*. Retrieved from: https://www.e-stat.go.jp/stat-search/files?page=1&layout=datalist&toukei=00200532&tstat=000001058052&cycle=0&tclass1=000001060135&tclass2=000001060136&stat_infid=000021430913 (accessed on 1 June 2020)
- Statistics Bureau of Japan (2015). *National Census 2015*. Retrieved from: <https://www.e-stat.go.jp/stat-search/database?page=1&layout=datalist&toukei=00200521&tstat=000001080615&cycle=0&tclass1=000001089055> (accessed on 1 June 2020)
- Statistics Bureau of Japan (2018). *Statistical Observations of Municipalities 2018*.
- Statistics Bureau of Japan (2019). 平成27年国勢調査 最終報告書 「日本の人口・

- 世帯」統計表. (*Statistics of the final report of Japanese population and household based on the Heisei 27 National Census*) Retrieved from:
https://www.e-stat.go.jp/stat-search/files?page=1&query=%E4%BA%BA%E5%8F%A3%E3%80%80%E9%9D%A2%E7%A9%8D%E3%81%8A%E3%82%88%E3%81%B3%E4%BA%BA%E5%8F%A3%E5%AF%86%E5%BA%A6&layout=dataset&toukei=00200521&tstat=000001080615&stat_infid=000031784238&metadata=1&data=1 (accessed on 5 April 2020 April)
- Statistics Bureau of Japan. (2014). *National Survey of Family Income and Expenditure 2014*. Retrieved from:
https://www.e-stat.go.jp/stat-search/files?page=1&toukei=00200564&tstat=000001073908&cycle=0&tclass1=000001073965&cycle_facet=tclass1%3Acycle. (accessed on 26 December 2019).
- Statistics Bureau of Japan. (2015). *National Census 2015*. Retrieved from:
https://www.e-stat.go.jp/stat-search/files?page=1&layout=datalist&toukei=00200521&tstat=000001049104&cycle=0&tclass1=000001049105&stat_infid=000031594311. (accessed on 01 March 2020).
- Statistics Bureau of Japan. (No date). *What is a Densely Inhabited District?* Retrieved from <https://www.stat.go.jp/english/data/chiri/did/1-1.html> (accessed on 31 August 2019)
- Stockdale, A. (2006). Migration: Pre-requisite for rural economic regeneration? *Journal of Rural Studies*, 22(3), 354-366.
- Suplicy, E. (2014). *Ten years of the Bolsa Familia Program in Brazil and the Perspectives of the Citizen's Unconditional Basic Income in Brazil and on Earth*. Retrieved from:
http://d3n8a8pro7vhm.cloudfront.net/bicn/legacy_url/61/BIEN2014_Suplicy1.pdf?1439837499. (accessed on 26 January 2018)
- Suplicy, E. M. (2008). From the Family Scholarship Program towards the Citizen's Basic Income in Brazil. *Proceedings of the Basic Income Earth Network 12th International Congress*. Retrieved from:
<https://www.socialjustice.ie/sites/default/files/attach/policy-issue-article/3321/4bisuplicybrazil.doc>. (accessed on 26 January 2017)
- Svallfors, S. (Ed.). (2012). *Contested welfare states: Welfare attitudes in Europe and beyond*. Stanford University Press. pp.226
- Tabatabai, H. (2012). From Price Subsidies to Basic Income: The Iran Model and Its Lessons. In K. Widerquist, M. W. Howard, (Ed.), *Exporting the Alaska Model* (pp. 17-32), New York: Palgrave Macmillan.

- Tcherneva, P. R., & Wray, L. R. (2005). Common Goals-Different Solutions: Can Basic Income and Job Guaranteed Deliver Their Own Problems. *Journal of Law & Urban Policy*, 2(1), 125-166.
- The Japan Institute for Labour Policy and Training. (2018). *Useful Labor Statistics (Yusufuru roudou toukei)*. Retrieved from: <https://www.jil.go.jp/kokunai/statistics/kako/2018/documents/useful2018.pdf>. (accessed on 12 November 2019).
- The State Council of China (2017). Report delivered by President Xi Jinping in the 19th CPC National Congress: *Secure a decisive victory in building a moderately prosperous society in all respects and strive for the great success of socialism with Chinese characteristics for a new era*. Retrieved from http://www.gov.cn/zhuanti/2017-10/27/content_5234876.htm (assessed on 3 June, 2020) (In Chinese)
- Tondani, D. (2009). Universal basic income and negative income tax: Two different ways of thinking redistribution. *The Journal of Socio-Economics*, 38(2), 246-255.
- Uemura, T. (2014). The Effects of Tax Revenue by Deductions of National Income Tax and Individual Inhabitants Tax. *Kwansei Gakuin University Repository*, 68(3), 319-332.
- Van der Veen, R. J. (1998). Real freedom versus reciprocity: Competing views on the justice of unconditional basic income. *Political Studies*, 46(1), 140-163.
- Van Parijs, P. (1991). Why surfers should be fed: the liberal case for an unconditional basic income. *Philosophy & Public Affairs*, 20(2), 101-131.
- Van Parijs, P. (1992). Competing justifications of basic income. In P. Van Parijs (Ed.), *Arguing for basic income* (pp. 3-43). London: Verson.
- van Parijs, P. (2004). Basic income: A simple and powerful idea for the twenty-first century. *Politics & Society*, 32(1), 7-39. doi:10.1177/0032329203261095
- Van Parijs, P., & Vanderborght, Y. (2017). *Basic income: A radical proposal for a free society and a sane economy*. London: Harvard University Press.
- Vanderborght, Y. (2004). *Universal Basic Income in Belgium and the Netherlands: Implementation Through the Back Door?* Retrieved from: <http://cadmus.eui.eu/bitstream/handle/1814/1875/sps2004-04.pdf?sequence=1&isAllowed=y> (accessed on 26 January 2018)
- Vollenweider, C. (2013). Domestic service and gender equality: An unavoidable problem for the feminist debate on basic income. *Basic Income Studies*, 8(1), 19-41.
- Von Gliszczynski, M. (2017). Social protection and basic income in global policy.

- Global Social Policy*, 17(1), 98-100.
- White, S. (1997). Liberal equality, exploitation, and the case for an unconditional basic income. *Political Studies*, 45(2), 312-326.
- White, S. (2006). Reconsidering the exploitation objection to basic income. *Basic Income Studies*, 1(2).
- Widerquist, K. (2001). Perspectives on the Guaranteed Income, part I. *Journal of Economic Issues*, 35(3), 749-757.
- Widerquist, K. (2005). A failure to communicate: What (if anything) can we learn from the negative income tax experiments? *The Journal of Socio-Economics*, 34(1), 49-81.
- Widerquist, K., & Lewis, M. A. (2006). An efficiency argument for the Basic Income Guarantee. *International Journal of Environment, Workplace and Employment*, 2(1), 21-43.
- Widerquist, K., Noguera, J. A., Vanderborcht, Y., & De Wispelaere, J. (2013). The idea of unconditional income for everyone In K. Widerquist, J. A. Noguera, Y. Vanderborcht, & J. De Wispelaere, *Basic income: an anthology of contemporary research*. (pp. xi-xxi). Blackwell.
- Williams, A. (1999). Resource egalitarianism and the limits to basic income. *Economics and Philosophy*, 15(1), 85-107.
- Wolff, J. (1998). Fairness, respect, and the egalitarian ethos. *Philosophy & Public Affairs*, 27(2), 97-122.
- Wright, E. O. (2004). Basic income, stakeholder grants, and class analysis. *Politics & Society*, 32(1), 79-87.
- Wu, A. M., & Chou, K. L. (2017). Public attitudes towards income redistribution: Evidence from Hong Kong. *Social Policy & Administration*, 51(5), 738-754.
- Xie, H., Wang, P., & Yao, G. (2014). Exploring the dynamic mechanisms of farmland abandonment based on a spatially explicit economic model for environmental sustainability: A case study in Jiangxi Province, China. *Sustainability*, 6(3), 1260-1282.
- Xinhua News Agency (2018). 中共中央国务院印发《乡村振兴战略规划（2018—2022年）》(Issuance of “Strategic Plan of Rural Revitalization (2018-2022)”). Retrieved from http://www.xinhuanet.com/politics/2018-09/26/c_1123487123.htm. (accessed on 2 March 2020)
- Yamamori, T. (2014). A feminist way to unconditional basic income: Claimants unions and women’s liberation movements in 1970s Britain. *Basic Income Studies*,

9(1-2), 1-24.

- Yang, P., & Barrett, N. (2006). Understanding public attitudes towards Social Security. *International Journal of Social Welfare*, 15(2), 95-109.
- Young, M. E., & Mulvale, J. (2009). Possibilities and prospects: The debate over a guaranteed income. Canadian Centre for Policy Alternatives.
- Zelleke, A. (2011). Feminist political theory and the argument for an unconditional basic income. *Policy and Politics*, 39(1), 27-42.
- Zhu, Y., & Xiao, D. (2015). Policy entrepreneur and social policy innovation in China. *The journal of Chinese sociology*, 2(1), 10.
- Zwolinski, M. (2011). Classical liberalism and the basic income. *Basic Income Studies*, 6(2).
- Zwolinski, M. (2017). Basic Income: A Radical Proposal for a Free Society and a Sane Economy. *Ethics & International Affairs*, 31(4), 523-526.

APPENDIX. INTERVIEW CONTENT FOR CHAPTER 5.

Social domain (S)

Impact on the rural livelihood (S.1)

- Improvement of the livelihood of residents in rural Ganzhou (S.1.1)

“From the perspective of reducing the poverty, I think BI is theoretically able to bring some benefits which is attractive to the government and the first one is to secure the local residents’ quality of life” (No.1 Interview referred to Table 5.3, the same below in this Chapter, shorted as No.1)

“Implementing BI in the rural areas is theoretically able to improve the quality of life of local residents.” (No. 4)

“Similar to rural old pension, I think BI could be considered one’s own money and it could be used by one’s own willingness: it could be used to improve the quality of life; it could be used by receivers to go to village clinic for treatment if there is a need. In fact, without such stable cash revenue, it is common that many people decide to tolerate and not go to clinic if they do not feel comfortable.” (No. 3)

“Local residents commonly asked whether it is possible to raise the amount of rural minimum subsistence allowance.” (No. 5)

“In Xingguo county, rural resident commonly reflected to the government that the amount of old pension they received was not enough for them to make a living.” (No. 5)

- Maintenance of dignity of rural residents (S.1.2)

“Cash revenue is very important for farmers. In the rural areas in Ganzhou, a common way for farmers commonly has to sell their means of production for, despite unstably, earning cash revenue. Therefore, I think BI can provide stable cash revenue for farmers especially elderly ones... an old farmer told me in person that after receiving old pension, he felt happy as he could confidently spend the money to buy snacks and drinks for his grandson. He had a strong feeling that he truly had the right to decide how to use the money.” (No.3)

- Relieving the children’s worry about their parents’ livelihood (S.1.3)

“From the perspective of social security, I think at least one merit of distributing BI among old people is that it would alleviate children’s worries and concerns on the livelihood of their old parents living in the hometown.” (No.4)

- Unfairness of BI functioning as rural societies security policy (S.1.4)

“We should be prudent in order to avoid unfairness and polarization before initiating reform on our social security system, such as replacing BI with existing social security system. Some people may consider BI, if its amount was equivalent to the standard of rural minimum subsistence allowance 305 RMB per month for example, is absolutely nothing while others may think this amount is not enough at all. Therefore, (if the amount of BI was decided improper), it may easily exacerbate the unfairness in the rural society if our aim is to secure our people’s livelihood.” (No. 4)

Impact on the social morality (S.2)

- Potential conflict with hardworking ethic (S.2.1)

“A universal welfare system such as BI would possibly cause laziness in the society. Regarding people’s livelihood, two features about our socialism governance can be summarized as follows: the first one is that preventing people from the starvation to death is a political mission, and the second one is that people should create wealth through work.” (No.4)

“Our current rural minimum subsistence allowance has been creating the issue of laziness... therefore, it would be even more risky to implement any universal welfare policies such as BI including all ages, especially young people. We even heard from some children that their dream is to be a certified poor household when they grow up. We think it is highly possible that many local young people become lazy and less motivated to carve out a good career once they receive BI.” (No.4)

“I also do not agree that any action to substantially improve the standard of our social security is proper for our country at present... It would be effective to prevent from the occurrence of poverty traps currently happening in those western welfare countries in our rural areas, if our social security level is designed strictly based on the consideration on our own social and economic status.” (No.4)

Economic domain (E)

Impact on the rural economy (E.1)

- Possibility of promoting the circular flow of local economy (E.1.1)

“If a policy like BI could be implemented in reality, certainly it would expand the consumer markets in our rural areas.” (No. 3)

“BI would be similar to what our government has done to address poverty in rural areas by promoting the consumption on local products and services from these areas. I think if BI was implemented in not only in cash, but also, for example, in local currency or point, it would theoretically be conducive to enhance the consumption in the local market and stimulate the provision of local job opportunities to allow people to create wealth. Consequently, it would eventually stimulate the growth of local industries and local economy” (No.1)

- Linkage between BI and financial market and financing services (E.1.2)

“BI could be used for the credit investigation on receivers, which consequently enhance the credit of large amount of rural population in the capital market. Thus, I suggested that BI should also be linked to the local finance and capital markets, which would be helpful to increase one’s credits for applying bank loan.” (No.7)

- Against free market for local economic development (E.1.3)

“Even though in the rural areas, if we implement an egalitarian system, which is similar to the long-term employment in Japan or People’s commune in China in 1960s, the pace of the development in the local areas

would be slowed down. This is disadvantageous for our rural Ganzhou to compete with other areas in terms of economic development.” (No.5)

“Stimulation of local consumer market should also follow the principles of free market economy. The government should take a role of guiding the development instead of interfering the market economy through approaches like BI.” (No.5)

- Potentially uncontrollable increasing prices of local commodities (E.1.4)

“Implementing a universal cash payment scheme like BI will probably lead to the price increases in the rural areas. And it is not sure how long the market price will be stabilized” (NO.5)

“I doubt that the local production can fulfill the demand of local consumers even through the stimulation of BI. Taking breeding industry as an example, currently a large portion of the pork meet is imported from other areas for the consumers in our county, [...] local supply cannot be expanded immediately as it requires long-term input of money and technology form outsides. [...] An unstable and increasing market price would influence the economic stability of rural society in Ganzhou” (No.5)

- Disordered local financial market (E.1.5)

“Providing that it could not be exchanged to the national legal tender, people may be reluctant to use this local-currency BI if what they want to buy is not produced locally at all. And if it could be exchanged to national legal tender, it is reasonable to worry about the appearance of bank run in

the rural areas” (No.5)

- Unwillingness to spend BI (E.1.6)

“The first reason why people may not be willing to spend BI is relevant to our traditional consideration on the use of money. It is highly possibly for people to save received BI rather than to spend it at first for the livelihood in the future after getting old in rural areas or the education of their children. The second reason is that our social security system is not enough. Therefore, each rural resident has to take their own responsibility on the expenditure on living, children’s education or medication in many cases.”

(No.6)

- Combination with the government intervention for developing local industries (E.1.7)

“The reaction of local government on the poverty reduction should focus more on motivation and guidance. That is to say, sort of guidance from the government is still necessary in the implementation of BI.” (No.1)

“Currently, the bonds issued to raise funding for the development projects relevant to the poverty reduction is special bond instead of normal bond. These projects should be ensured with clear aim of making profits, which means that they are closely linked to the development of the industries in a certain area. Without confirming the how much profits that BI can possibly bring, it is risky to issue bonds to finance this policy.... A possibly solution might be that let the government guide receiver to invest BI into projects”

(No.6)

“The efficiency of using the money is significantly important for us as our financial revenue is originally insufficient. Doing agriculture is usually with big risks. It is unrealistic to expect all of the rural residents to invest their BI into small-scale agriculture and then earn profits stably.” (No.6)

“In China, the rural population is still huge and farmland per capita is limited, which hamper the development of such large-scale agricultural industry. It is impossible for an individual to develop such large-scale agricultural industry. [...] Therefore, I think the development of local industry to a large scale should mainly rely on agricultural cooperation. From the beginning phase of developing local industry, the village committee should take the leading role to strength the power of the whole villager in the rural areas to negotiate with investors from outside in the business. At the meantime, our local government can provide financial subsidies, such as BI, or other policy support on developing business.”

(No.6)

Impact on the local employment (E.2)

- Lowering the labor cost (E.2.1)

“The implementation of BI in rural Ganzhou may lead to a consequence that people from outside of Ganzhou may be willing to migrate to here as they see BI is distributed. And it is principally worked to migrate from one village to other villages. A positive one is that the labor cost in the rural areas might be reduced with the increasing of labor supply.” (No.7)

- The amount of BI per capita at a high level as a key precondition to enhance local employment (E.2.2)

“If the amount of BI is decided at the level of around 300 yuan per month, equivalent to our rural minimum subsistence allowance, I think it is insufficient to attract people to stay in their hometown. As far as our knowledge, one going to work in the coastal regions of our country can earn 5000 RMB on average per month.” (No.5)

“If people who are in the working age were able to receive BI (and the amount of BI should be enough, say 1000 RMB/month), it is likely to have positive impacts to enhance people work locally. Currently the number of job opportunities provided in the local job markets is sufficient in general (but the issue is the income gap between rural areas and the urban areas in the coastal regions in China)” (No.5)

Political domain (P)

Relationship with the future rural governance (P.1)

- Prevention on reappearance of extreme poverty (P.1.1)

“I think BI could possibly be applied as an approach contributing to the rural revitalization after the era of target poverty reduction as it can prevent many rural residents from falling into the extreme poverty issues again.” (No.1)

- Alleviation of the current burden of civil servants (P.1.2)

“Taking the rural minimum subsistence allowance as an example, it usually takes a half year for the government to officially certify a qualified

household to receive the subsidies, which includes the investigation, democratic appraisal among villagers, deliberation in the township government and random inspection. The civil servants participated in the above who came from the civil affairs bureau and other departments are commonly under great pressure. According to our communication with the government in the Eastern coastal regions, they purchased the survey services provided by the private companies and it turns out that the average cost to certify each qualified household is about 600 yuan. This price is for sure not affordable for us.” (No.4)

- Necessity of further specifying policy targets (P.1.3)

“Compared with any universal welfare policies such as BI which is theoretically bringing some benefits to the local society, it is more urgent to address practical issues about education, health care and accommodation.” (No.5)

“Specifically speaking, we have to consider how to accurately identify and confirm the poor household as our targets. In the era of post target poverty reduction, how we should define those households whose annual income is just slightly above the poverty line, and thus secure their livelihood.” (No.1)

“One example is to make a new categorization called pre-poor households of which their annual household income is 1.5 times of the poverty line. But we have to say that currently there is no any other better options mainly because we do not have any data specifically record the expenditure and revenue of our rural households.” (No.1)

“For example, we can set up a standard of so-called pre poor household whose household income level is 1.5 times of the poverty line. And we can further discuss what policies is proper to secure the livelihood of those households. (No.4)

“One issue is that currently benefits can be entitled to certified poor household is not only monetary subsidies, but also many benefits, such as health care, and education. For example, the amount of expenditure in the health care which can be refunded is largely different between certified poor household and others. We have to alleviate such gaps between certified poor household and others by releasing more specified policies.” (No.4)

- Necessity of remaining and adjusting existing policies (P.1.4)

“I think the implementation of BI should also consider the combination of preferential policies and special policies in order to lead a reform on our current poverty reduction strategies,” (No.1)

“I think that our government should still mainly put more efforts on the education and medical health in the rural areas, despite any universal welfare program, such as BI, seems able to generate some positive impacts, such as the improvement of the livelihood, to the local people. I think the issues that we are currently trying to address in the targeted poverty reduction cannot be figure out by directly giving cash. We should ensure programs targeting on specified groups of people.” (No.2)

Financing and distributing BI (P.2)

- Doubt on acceptance of distributing BI through technology (P.2.1)

“For distributing BI in the form of points system or digital currency is the utilization of financial technology. I think that many rural people are possibly not capable of using such financial technology. According to our field survey on the utilization of technology in the past, our result reveals that 40 percent of the rural resident, who are majorly elders, do not know how to use Ali pay (a common digital payment application in China) through smart phone at all. Such result implies that there would a potential knowledge gap for rural residents to use BI if implemented through those financial technologies.” (No.7)

- More expenditure from the municipal public finance on rural policy (P.2.2)

“An approach to finance BI is about the structural adjustment on the items of financial expenditure in Ganzhou City based on the shift of national plan from targeted poverty reduction to rural revitalization. Corresponding to such shift, our city government may also be able to save some expenditure as some of the targeted policies are removed.” (No.2)

“Overall, from the perspective of public finance, I think in order to implement a policy like BI it is important for Ganzhou City government to provide more financial support at the municipal level. Taking the old pension as an example, the national average level is about 160 RMB per month while it is less than this level in Ganzhou. Therefore, it is difficult to shorten such gap between the rural areas in Ganzhou and the whole country if there was no more support from the public finance at the municipal level

in the future.” (No.3)

- Necessity of financial support from superior government (P.2.3)

“From the perspective of public finance, such universal welfare policy cannot be implemented based on the public finance of Ganzhou City government. [...] public finance transfers from the central government is a key source of finance revenue for Ganzhou City Government. In terms of securing people’s livelihood, 80 percent of the expenditure on its relevant policies actually comes from the transfers from the central government and provincial government, while only 20 percent of the expenditure comes from the financial revenue generated from Ganzhou City its own.” (No.2)

“It is impossible to afford a policy like BI merely based on our own public finance of Xingguo county. [...] BI has to be implemented based on the transfers from the public finance of central government.” (No.5)

“According to our current situation, if we were about to launch BI, we have to rely on the financial allotment from the central government. The allotment from the central government ensure the money from wealthier regions to poorer regions in China. It is definitely insufficient to implement BI based on the public finance expenditure of our local government.” (No.6)

- Increasing taxation and issuing bonds (P.2.4)

“The other pathway to finance BI by increasing the financial revenue of the government is from the payment of those regular tax items, [...] If various industries in Ganzhou could usher an explosive growth in the coming future,

it is anticipated that the tax revenue of the Ganzhou government would also increase correspondingly. [...] Currently, the government aims to promote the development the core industries in Ganzhou City including for example, new energy automobile, furniture, medicine, electronic information and clothes.” (No.7)

“If there is a need to issue bonds to raise the funding for BI, it can only be the special bonds on certain projects with certain among of profits assured ahead rather than normal bonds. Hence, a possible solution is that government can issues bonds to invest projects promoting the circular flow of money in Ganzhou City, [...] and then finance BI in rural areas by the profit” (No.7)

- Linkage between public finance and external capital market (P.2.5)

“Currently various non-taxation financial revenue of Ganzhou government is commonly spent for fixed purposes. Taking the current cash deposits of environmental protection rare earth industry, sewage fee, forest vegetation recovery fee, flood control fund as examples, [...] they cannot be used for any other purposes, [...] If such different deposit schemes or funds can be reformed as a single holistic fund scheme...with more flexibility to be used for other purposes, as far as I concerned, it is reasonable to discuss whether this part of money is applicable for investment aiming to generate more financial revenue of local government when it is idle temporarily. Ideally, such holistic fund could be put into the investment on private sectors combined with monetary leverage, [...] I think in the future the government

can use the financial revenue which is temporarily idle as capital fund and attract money from the society by issuing bonds for the investment, and consequently the profits could be used as financial source for implementing BI.” (No.7)

Practical preconditions for implementing BI (P.3)

- Necessity of being nominated as an experimental area (P.3.1)

“If Ganzhou implemented BI for strengthening local economy without any top-level policy design from the central government, the economic development of our neighboring regions would be possibly influenced negatively as the human resources or money in those regions would possibly migrate to Ganzhou. This is politically not applicable in the context of China.” (No.5)

“But of course, the main factor hindering to realize above idea (reforming the current usage of different cash deposit and funds and put them into investment) is about how the financial budget of local government is made. [...] Policy support from the central government is required. [...] This would highly depend on whether our local government could make it possible to be nominated as a special experiment area by the central government.” (No.7)

- Modification on the approaches for implementation (P.3.2)

“I think BI is feasible to be implemented in welfare countries while it is debatable in the context of developing countries. I think it would be better if

we can apply a sort of compensation system to lift all households in rural Ganzhou above the poverty line. For example, if the above poverty line is 4000 yuan per year and current household revenue is 2000 yuan, then we should give this household 2000 yuan more. [...] Specification of targeting should also be considered in the implementation of BI.” (No.1)