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WHY ARE RURAL COMMUNITIES RELUCTANT TO ADOPT THE STANDARD VERSION OF SROI?

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ABSTRACT. Social Return on Investment (SROI) is an evaluation method that is often useful in assessing Not for Profit organizations (NFP). Its standard version has been widely adopted in the United Kingdom. However, there is a reluctance among East Asian rural communities to adopt standard SROI evaluation methods, even though they have been adopted for some NFPs in urban centers in the region in the past. NFPs in rural communities cannot bear the cost of sending representatives to meetings where drafts of potential regulations are discussed. However, the introduction of regulations for evaluating NFPs without representatives from rural communities could lead to the exclusion of pertinent voices key to the discussion. There are several reasons why the hands-on approach currently utilized by SROI evaluation methods appears unsuitable for rural communities. These communities are already aware of their aging populations and they have obligations to the welfare of their members that fall outside the scope of SROI. In addition to this, the main argument why rural communities are reluctant to adopt SROI methods is that it does not bring much benefit to these communities. However, discussing evaluation methods for NFPs could serve as a bridge with stakeholders in rural communities. Paradoxically, a nonstandard version of SROI that is calculated by those outside of NFPs may be a more suitable method for rural communities.

JEL Classification: M41, L31, O18

Keywords: NFPs, rural community, SROI, autonomy, hands-on approach

Introduction

Many economists and business administration scholars have been researching evaluation methods for measuring the social impact of Not for Profit organizations (NFP). NFP evaluation is necessary for the promotion of their growth (Esptein & Yuthas, 2014). Social Return on Investment (SROI) is a method developed in the United States that has become quite popular among scholars. The standard version of SROI has been widely adopted in the United Kingdom. A guide authorized by the U.K. Cabinet Office allows NFPs to select one ratio from the options below (Nicholls et al., 2012):

Gross SROI Ratio = Present Value / Value of Inputs

and

Net SROI Ratio = Net Present Value / Value of Inputs

The standard version of SROI has become so commonplace among the versions adopted that it is often just referred to as 'SROI' when discussing it. Despite its prominence, any dysfunctional points that this particular evaluation method has should be identified and addresses for the sake of NFP stakeholders. One such significant dysfunctional point is that SROI methods have not been widely adopted in East Asia (Shen & Koziel, 2021). While there have been cases where these methods have been adopted in urban parts of Asia such as Tokyo (Ito, 2017), rural communities in East Asia appear reluctant to adopt the standard version of SROI. Some stakeholders in these communities have even been critical of this method. It is necessary to clarify the reasons for this reluctance before considering how to address the dysfunctional points of SROI. The goal of this research is to outline these reasons.

The Organisation for Economic Co-operation and Development review OECD Rural Studies has an illuminating description of what constitutes a rural community. The word rural has many definitions and "rural" is sometimes simply defined as "not urban" (OECD, 2020). Still, even though much of Europe and North America have become heavily urbanized, one influential sociology textbook characterizes the global rural population as being of a significant size (Plummer, 2022). Focusing on the U.K. and the U.S. economies, a frequently cited sociological book argued there is a tendency for rural communities to be discounted (Bauman, 2001). Yet in East Asia, many rural communities prevail in the 21st century. In recent years, some scholars have also focused on Eastern European migrants living in flourishing rural communities in the U.K. and the poverty experienced by these migrants (MacKell & Pemberton, 2018). Findings related to East Asian rural communities may also provide clues for European NFPs to improve the situation of these migrants.

The reasons why rural communities are reluctant to adopt SROI evaluation methods can be understood through the field of sociology. While economic research into communities can provide useful information for accounting research purposes, at the same time it limits perspectives on the information obtained due to its narrow frame of reference (Ravenscroft & Williams, 2021). Mainstream sociological research is also conducted primarily using statistical information (Plummer, 2022) but provides a broader view. As such, some accounting scholars have turned to sociology to address the shortcomings of economic research. Placing an emphasis on sustainability, they have been investigating the dysfunctions of accounting when compared with sociology. (Fleischman, 2013).

Several reasons why rural communities are reluctant to adopt SROI methods are presented in this paper. The scope of this research does not extend to unexpected findings, limiting the ambiguity of any conclusions.

1. Literature review

Residents of contemporary Chinese rural communities have non-physical needs, according to the Chinese General Social Survey (Xu et al., 2023). Not all countries in East Asia conduct such large scale surveys, but because they have many sociological similarities, it can be assumed that residents of contemporary South Korean and Japanese rural communities have non-physical needs as well. NFPs providing welfare to these communities are necessary to satisfy these needs.

SROI is commonly considered to be based on utilitarianism (Bockarjova et al., 2022 & Maier et al., 2014). Among its variations, one type of utilitarianism is consequentialism (Horta et al., 2022). In addition to the standard version of SROI, other versions of SROI are also advocated. Besides the standard version of SROI, the Impact Multiple of Money (IMM), which is calculated by entities outside of NFPs, has emerged in recent years (Addy et al., 2019). One disadvantage to this version is that, on its surface, IMM appears to run counter to individual autonomy due to its lack of stakeholder discourse when being calculated.

A number of salient topics concerning the activities of NFPs in rural communities have been identified. For example, there are greater levels of civic engagement in the U.S. rural areas and civic engagement is a factor in social capital (Chetty et al., 2022). Residents of rural communities tend to place a heavier emphasis on religious activities than in urban areas (Oosterhoff et al., 2019). These religious activities include rituals such as festivals that are researched in anthropology (Eriksen, 2017). Successful rural innovation requires bridging social capital and competence trust (King et al., 2019). In Japan, some NFPs are engaging with stakeholders in rural communities (Shogenji, 2021).

In the West, it is sometimes suggested that pre-modern jobs in communities were meaningful and residents in communities had a degree of autonomy in working, even though they lacked autonomy as individuals in general (Bauman, 2001). One best-selling general interest book in anthropology goes so far as to declare that non-hands-on jobs are often "bullshit" jobs that are not meaningful, making reference to SROI (Graeber, 2018). The meaningfulness of working can be a topic for NFPs too (Sandberg et al., 2021). Bricolage, for example, is related to this type of hands-on approach to some extent. Several social entrepreneurs have succeeded through bricolage, for example in Europe and South America (Simón-Moya & Rodríguez-García). An agricultural science textbook that was written in line with Japanese agricultural science traditions also seems to be based on bricolage (Shogenji, 2021).

The elderly makes up large proportions of East Asian rural communities (Fifield, 2015, Lee et al., 2021, & Liu, 2016). Some types of NFP activities do not generate high SROI ratios among the elderly, while other types do (Bosco et al., 2019 & McCosker et al., 2020).

VOSviewer version 1.6.19 can draw relationships around "rural" and "community." Figure 1 is created from a file from Scopus on March 2, 2023. The file contains bibliographical data for the latest 2,000 articles whose titles contain both "rural" and "community." The date of publication of the articles range from 2021 to 2023.

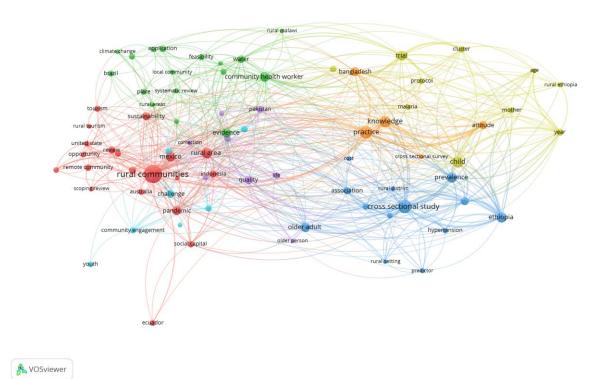


Figure 1. Map of relations around "rural" and "community" Source: *own compilation from data of Scopus*

Statistical analysis is a key tool for economists and sociologists. It can be used to find a way to improve the well-being of residents of rural areas (Jachimowicz et al., 2017). Statistical analysis includes traditional types of analysis such as Gini coefficient analysis and odds ratio as well as new types of analysis like bibliometric analysis. It is known that a Gini coefficient can be calculated not only for cumulative income but for other factors (Sueyoshi et al., 2021). Travel time can be used in researching rural communities (Cattaneo et al., 2021). Odds ratio is used not only in a medical context but also in social science contexts. For example, analysis between formal collaboration and informal collaboration can be proceeded by odds ratio (Terman et al., 2020). One piece of prior literature has provided deep insights into accounting through the sophisticated use of VOSviewer (Vagner, 2021).

One widely read paper on SROI is based on interviews (Bellucci et al., 2019). Some scholars conduct interviews in order to research rural communities as well (Arnott et al., 2021). Ethical issues surrounding interviewing have been discussed by some experts (Brinkmann & Kval, 2018). A few sociologists use observations in public spaces. Observations in the public spaces of urban areas may produce numerous findings (Angrosino, 2007). Even observations of public spaces of rural communities may produce findings.

2. Methodological approach

The methodological approach to tackle the research question is a combination of a pilot study and a main study.

In order to confirm that rural communities occupy a large weight sociologically in Japan, a comparison of cultures between the U.K., the U.S., and Japan was conducted as a proposition of the combination mentioned above. This comparison is based on statistical data from the

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World Value Survey (WVS). WVS contains detailed data on many countries including the U.K., the U.S., and Japan (Haerpfer et al., 2022).

Three ideas regarding communities, which were proposed in a widely cited book, are instructive in deciding which data are necessary (Bauman, 2001):

- (1) Communities regard provision of welfare as their obligation, and welfare by charities denies these obligations.
- (2) Communities restrict individual autonomy in general.
- (3) Communities need their residents to have a sense of belonging.

Active membership in charitable or humanitarian organizations, Welzel emancipative values, and the left-right political scale will answer how many communities stand in each country. While it is unclear whether these widely cited ideas are truly accurate, this concern is beyond the scope of this report.

In the pilot study, an interview with a practitioner of SROI evaluation methods working at a Japanese NFP dedicated to rural communities named Yodakas Research Institute was conducted on Dec. 5, 2022. Because the practitioner indicated that this NFP takes a cautious stance toward SROI, it is suitable as an interviewee (Koike, 2020). The NFP has expertise in contemporary evaluation methods for NFPs and is critical of the standard version of SROI. The NFP's offices operate in Neo District, Motosu City and Taniguminagase District, Ibigawa Town in Gifu Prefecture. The interview was conducted in Neo District.

In order to find supplemental information, observations in public spaces were conducted at Motosu City and Ibigawa Town on Dec. 4, 2022. Visiting the Ibigawa Museum of History and Folklore on the same day brought about a greater sociological and anthropological understanding of Ibigawa Town.

Gifu Prefecture is located in central Japan (Figure 2). Both Motosu City and Ibigawa Town are rural municipalities consisting of several districts. Each of these districts consists of several rural communities. In particular, Neo District and Taniguminagase District consist of multiple rural communities whose economies rely on agriculture and forestry. The population of Neo District was 1,212 people as of December 2022 (Shinsei Office of Motosu City, 2023) and the population of Taniguminagase District was 719 people in October 2015 (Kitamoto, 2023).



Figure 2. Gifu Prefecture Source: own compilation using a module of Python named as japanmap provided by Tsutomu Saito through the Apache License

Because these research methods were adopted in order to proceed with just a pilot study, an ethical review by an internal review board (IRB) was not conducted.

Gini coefficient will be calculated using Python 3 as a calculator. The number of rural communities cooperating on welfare with NFPs, schools, or profit-oriented entities are the main focus. The categorization of rural communities is conducted according to travel time from their closest densely inhabited districts (DIDs). A Lorenza curve can be drawn based on the cumulative proportions of the number of rural communities and the number of categories.

As is usually the case in the rest of the world, in East Asia topics of importance to a particular community are generally discussed in a group setting. In Japan, *yoriai*, which are meetings of rural communities, is the de facto place where discussion regarding festivals are held. Separately, the topic of welfare is also a key discussion topic at *yoriai*. Japan's Ministry of Agriculture, Forestry and Fisheries (MAFF) discloses how many rural communities discuss each topic at *yoriai* meetings and how many rural communities held *yoriai* meeting in total. The odds ratio for the topic of welfare will be calculated by IBM SPSS 28 which is a reliable application for social scientists.

Further results of analysis by VOSviewer will be discussed.

Statistical analysis, interviews, observations in public spaces, and visiting a museum were conducted solely by the author of this paper. There were essentially no unpredictable difficulties in conducting this study as these methodologies are simple and there is an ample amount of prior literature.

The main statistical data are collected from MAFF's 2020 Census of Agriculture and Forestry. While the main portion of the data from this census is published in English and Japanese, specific details are only in Japanese. This census was obtained from the Survey on Rural Communities (MAFF, 2022 & 2021).

3. Conducting research and results

3.1. Confirmation

The results of active membership of charities, Welzel emancipative values, and left-right political scale values are in table 1.

Table 1 Means on WVS

	Japan	U.K.	U.S.
Membership in Charities	0.1	3.4	5.0
Welzel Emancipative Values	0.56	0.65	0.56
Left-Right Political Scale	5.75	5.01	5.32

Source: own compilation from data of WVS

Active membership in charities is far lower in Japan than in the U.K. and the U.S. Japanese culture is more right-leaning than the U.K. culture and the U.S. culture. The U.K. culture has a greater degree of respect for individual autonomy than Japanese culture, though there is almost no difference between the U.S. and Japanese cultures in this regard. Based on the data, it can almost be confirmed that rural communities occupy a large weight sociologically in Japan.

3.2. A Pilot Study

Much of the information was acquired through an interview with the Yodakas Research Institute. Because of the clear, extensive explanation given by the practitioner working for this NFP, the information can be easily interpreted academically.

This NFP is influenced by agricultural science and its activities are based on bricolage, though these activities are well planned and not patchwork. It is conducting activities to establish bridges with stakeholders in rural communities in Gifu Prefecture. Yodakas does not need to acquire large funding but needs to acquire small constant funding in order to maintain bridges with stakeholders. The staff of this NFP also collaborates with national and prefectural governments and teach as adjuncts at universities outside these communities. These types of staff activities and teaching are carried out in order to enable residents in these communities to hear the NFP's voice through competence trust. The NFP's efforts to gain competence trust show that it is acting in accordance with a knowledge of sociology.

This NFP agrees with the principles of utilitarianism to a certain extent because consequentialism can avoid harassment and overwork as consequences of virtuous motivations at NFPs. However, this NFP does not believe that SROI is based on utilitarianism. They think that SROI does not have the ability to produce large benefits for society.

Residents were found to have a limited interest in civic engagement, although there is a much greater interest in other types of social capital. Despite low levels of interest, Motosu City is currently officially trying to promote civic engagement. This is because the city's mayor aims to gain the support of residents through promotional activities. Ibigawa Town does not strongly

promote civic engagement at the moment. This is because the town can receive grants from the national government and does not depend upon the support of residents for financial support.

Young women have a hard time living comfortably in these communities due to a lack of individual autonomy. For this reason, the population of young women was low in these communities and there were no babies born at all in Neo District in one recent year. These communities are also aging. This NFP does not think that high SROI is derived from the elderly, so it does not expect large NFPs to open branches in these communities. Even if regulations are enacted requiring large NFPs to calculate SROI, there will be no impact on these communities without large NFP branches.

Although this NFP agrees with utilitarianism to a certain degree, it also thinks that welfare should be provided to the elderly regardless of its social impact.

Attending promotional events for any evaluation method can serve as an opportunity to build bridges with NFP stakeholders. However, when it comes to the development of evaluation methods, small NFPs in rural communities do not have the financial resources to shoulder the overhead costs associated with this type of development process and as a result end up being excluded. Only large NFPs are seen as having the resources to participate in this type of development. As such, newly developed evaluation methods will not be suitable for small NFPs.

Staff at some NFPs do not consider office work to conduct evaluations, including their efforts to calculate SROI, as being meaningful, because they favor a hands-on approach. If IMM reduces their office work, it may be preferable. However, one conditional requirement for IMM is that it must be used by on-site NFPs in order to spontaneously appeal to intermediate foundations for fundraising. But if IMM is used by intermediary foundations to supervise on-site NFPs, it would not be preferable.

There was a gorgeous exhibition for a festival at the museum in Ibigawa Town. It can be ascertained that small rural communities in Gifu place a great importance on festivals to the same extent that other rural communities in Japan do.

Residents of Motosu City and Ibigawa Town also have relationships with outsiders. There may be opportunities for NFPs to provide services for such families living outside of rural communities in such municipalities. Of course, there may be differences among rural communities within a municipality and a pilot study cannot provide sufficient evidence for these possible opportunities.

3.3. Statistical analysis

Descriptive statistics on categories of rural communities cooperating on welfare with NFPs, schools, or profit-oriented entities appear in Table 2. The Gini coefficient for these cooperative acts is calculated as 0.607. Inequality within these cooperative acts appears in Figure 3.

Table 2 Descriptive Statistics on Categories of Rural Communities

Travel Time	Number of Communities
~0.5h	2,776
0.5h~1.0h	660
1.0h~1.5h	87
1.5h~	65
Total	3,588

Source: own compilation from MAFF data

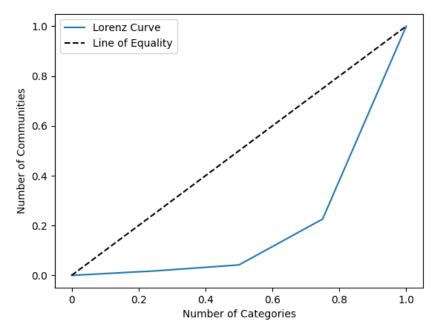


Figure 3. Inequality Source: *own compilation from data of MAFF*

The Gini coefficient is high. It can be said that there is a large degree of inequality among these cooperative acts. Rural communities which are near DIDs have the almost all of the exposure to cooperation. At the moment, most large NFPs appear to not be present in rural communities that are far from DIDs. As such, large NFPs which can bear overhead costs are unlikely to represent rural communities when discussing new legal regulations for evaluation methods.

Because rural communities will not be represented, if any legal regulations on evaluation are enacted, such regulations will undermine the autonomy of these rural communities.

Descriptive statistics on *yoriai* meetings are in Table 3. Results calculated on odds ratio of welfare as a topic are shown in Table 4.

Table 3 Descriptive Statistics on *Yoriai* Meetings

	Festivals	Welfare	Total
Yes	112,704	74,774	187,478
No	16,636	54,566	71,202
Total	129,340	129,340	258,680

Source: own compilation from data of MAFF

Table 4 Odds Ratio

Particularity Particularity	OR (95% CI)
Civic engagement	0.202 (0.198-0.206)

Source: own compilation from data of MAFF

Table 4 shows that civic engagement is obviously considered inferior to festivals in rural communities in Japan. Residents of rural communities are rarely involved with civic engagement without triggers. This odds ratio is the opposite of the data of rural areas in the U.S. shown in prior literature. NFP activities to establish bridges with stakeholders appear to be vital

triggers. Promotional events for any evaluation method are desirable for rural communities because bridging seems vital.

VOSviewer shows a relationship between "rural communities" and "social capital," and "rural communities" and "practice," and a relationship between "rural communities" and "older adults." These relationships are supportive for interpretations on rural communities mentioned above.

The frequency of "practice" is very high and there is also a relationship between "practice" and "sustainability." Thus, it can be said that the hands-on approach is widely adopted in rural communities, especially in the context of sustainability. If the hands-on approach is denied, rural communities will lose one key benefit for stakeholders there.

The term "older adult" is quite frequently used. Also, "older person," "child," "youth," "adult" and "age," which are related terms commonly related to "older adult," are frequently used. As such, it can be inferred that the problem of aging in rural communities is a topic that is clearly of interest to scholars.

A widely read interpretation is that communities have an obligation to provide their members with welfare as mentioned above. A community probably believes that community membership is the sole condition for welfare and that welfare in a community must be provided regardless of the social impact. Stakeholders are aware of aging in rural communities and rural communities are aware of their obligations to their members in terms of welfare. A high proportion of elderly residents within these communities appears to be a major factor behind their reluctance to adopt SROI.

There is also another unexpected finding. The term "rural area" is somewhat similar to "rural community." There is a relationship between rural areas and tourism. It can be said again that through these residents of rural communities have relationships with outsiders.

Conclusion

East Asian rural communities have several reasons to be reluctant to adopt the standard version of SROI. Because NFPs in rural communities cannot bear the cost of sending representatives to meetings to discuss drafts of regulations to regulate evaluations of NFPs, it could undermine the autonomy of rural communities by excluding them from participation. At the moment, SROI's hands-on approach in rural communities does not appear suitable and it is not perceived as bringing many benefits to rural communities. Rural communities are aware that their populations are aging and are aware of their obligations to their members on welfare that exist regardless of SROI. However, discussing evaluation methods of NFPs can function as a way of bridging stakeholders in rural communities.

It is still undoubtedly necessary to evaluate NFPs in order to accelerate their social impact. Paradoxically, if intermediate foundations cautiously use IMM to evaluate on-site NFPs in rural communities, it may satisfy various stakeholders in these communities.

The limitation of this research is that unexpected findings are not expanded upon. The unexpected findings include the relationships between insiders and outsiders in rural communities and the institutional difference between two municipalities in Gifu Prefecture in their public policies concerning civic engagement.

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References

- Addy, C., Chorengel, M. Colling, M., &Etzel, M. (2019). Calculating the value of impact investing an evidence-based way to estimate social and environmental returns. *Harvard Business Review*, 97(1), 102-109.
- Angrosino, M. (2007). Doing Ethnographic and Observational Research (Sage Publications, London).
- Arnott, D., Chadwick, D. R., Wynne-Jones, S., Dandy, N., & Jones, D. L. (2021). Importance of building bridging and linking social capital in adapting to changes in UK agricultural policy. *Journal of Rural Studies*, 83, 1-10.
- Bauman, Z. (2001). Community: Seeking Safety in an Insecure World (Polity Press, Cambridge).
- Bellucci, M., Nitti, C., Franchi, S., Testi, E., & Bagnoli, L. (2019). Accounting for social return on investment (SROI): The costs and benefits of family-centered care by the Ronald McDonald House Charities. *Social Enterprise Journal*, 15(1), 46-75.
- Bockarjova, M., Botzen, W. J. W., Bulkeley, H. A., & Toxopeus, H. (2022). Estimating the social value of nature-based solutions in European cities, *Scientific Reports*, 12:19833. doi: 10.1038/s41598-022-23983-3
- Bosco, A., Schneider, J., & Broome, E. (2019). The social value of the arts for care home residents in England: A social return on investment (SROI) analysis of the Imagine Arts Programme. *Maturitas*, 124, 15-24.
- Brinkmann, S., & Kvale, S. (2018). Doing Interview, Second Edition (SAGE Publications, London).
- Cattaneo, A., Nelson, A., & McMenomy, T. (2021). Global mapping of urban-rural catchment areas reveals unequal access to services. *Proceedings of the National Academy of Sciences*, 118(2), 1-8. doi: 10.1073/pnas.2011990118
- Chetty, R., Jackson, M. O., Kuchler, T., Stroebel, J., Hendren N., Fluegge, R. B., ···Wernerfelt, N. (2022). Social capital I: Measurement and associations with economic mobility. *Nature*, 608, 108-121.
- Epstein, M. J., & Yuthas, K. (2014). Measuring and Improving Social Impact: A Guide for Nonprofits, Companies and Impact Investors (Routledge, Sheffield).
- Eriksen, T. H. (2017). What is Anthropology?, Second Edition (Pluto Press, London).
- Fifield, A. (2015, May 26). With rural Japan shrinking and aging, a small town seeks to stem the trend. *Washington Post*.
- Fleischman, R. K. (2013). A review of critical histories of accounting. In R. K. Fleischman, W. Funnell, & S. P. Walker (eds.), Critical Histories of Accounting: Sinister Inscriptions in the Modern Era (Routledge, Oxon), pp. 15-54.
- Haerpfer, C., Inglehart, R., Moreno, A., Welzel, C., Kizilova, K., Diez-Medrano, J., · · · Puranen, B. (eds.) (2022). World Values Survey: Round Seven Country Poolede Datafile, Version 5.0 (JD Systems Institute & WVSA Secretariat, Madrid & Vienna). doi: 10.14281/18241.20
- Horta, O., O' Brien, G. D., & Teran, D. (2022). The definition of consequentialism: A Survey. *Utilitas*, *34*, 368-385.
- Ito, K. (2017). *Social Impact Measurement and Its Application as SIBs in Japan*. (Parallel Session B2 02) Retrieved from Institute for Social Entrepreneurship in Asia website: https://isea-group.net/files/Parallel%20Session%20B2%20-%2002%20-

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- %20SROI%20as%20a%20Tool%20for%20Evaluating%20and%20Enhancing%20Socia 1%20Enterprise%20Performance%20(Japan).pdf
- Jachimowicz, J. M., Chafik, S., Prabhu, J. C., & Weber, E. U. (2017). Community trust reduces myopic decisions of low-income individuals. *Proceedings of the National Academy of Sciences*, 114(21), 5401-5406. doi: 10.1073/pnas.1617395114
- King, B., Fielke, S., Bayne, K., Klerkx, L., & Nettle, R. (2021). Navigating shades of social capital and trust to leverage opportunities for rural innovation. *Journal of Rural Studies*, 68, 123-134.
- Kitamoto, A. (2023). Geoshape [Taniguminagase (035000)] (Center for Open Data in the Humanities, Tokyo) Retrieved from https://geoshape.ex.nii.ac.jp/ka/resource/21/214010350.html (In Japanese)
- Lee, J., Oh, Y., Yoo, S., & Suh, K. (2021). Vulnerability assessment of rural aging community for abandoned farmlands in South Korea. *Land Use Policy*, 108, 105544.
- Liu, J. (2016). Ageing in rural China: Migration and care circulation. *Journal of Chinese Sociology*, 3(Article No. 9). doi: 10.1186/s40711-016-003
- MAFF (2022). 2020 Census of Agriculture and Forestry. Retrieved from e-Stat website https://www.e-stat.go.jp/en/stat-search/files?page=1&layout=datalist&toukei=00500209&tstat=000001032920&cycle=7&year=20200&month=0&tclass1=000001147146&tclass2=000001163067
- MAFF (2021). 2020 Census of Agriculture and Forestry. Retrieved from e-Stat website https://www.e-stat.go.jp/stat-search/files?page=1&layout=datalist&toukei=00500209&tstat=000001032920&cycle=7&year=20200&month=0&tclass1=000001147146&tclass2=000001155386&tclass3=000001155488&tclass4val=0 (In Japanese)
- Maier, F., Schober, C. Simsa, R., & Millner, R. (2015), SROI as a method for evaluation research: Understanding merits and limitations, *Voluntas*, 26(5), 1805-1830. doi:10.1007/s11266-014-9490-x
- MacKrell, P., & Pemberton, S. (2018). New representations of rural space: Eastern European migrants and the denial of poverty and deprivation in the English countryside, *Journal of Rural Studies*, 59, 49-57.
- McCosker, A. (ed.)(2020). Improving the Digital Inclusion of Older Australians. (Swinburne University of Technology, Melbourne). Retrieved from the Department of Social Sevices website https://www.dss.gov.au/sites/default/files/documents/03_2021/improving-digital-inclusion-older-australians-social-impact-be-connected-16-june-2020.pdf
- Nicholls, J., Lawlor, E., Neitzert, E., & Goodspeed, T. (2012). A Guide to Social Return on Investment, Second Edition (The SROI Network, Liverpool).
- OECD (2020). Rural Well-Being: Geography of Opportunities (OECD Rural Studies) (OECD Publishing, Paris).
- Oosterhoff, B., Metzger, A., & Alvis, L. (2019). Similarities and differences in adolescents' organized and civic activity networks across rural and non-rural communities. *Journal of Youth and Adolescence*, 49, 1464-1480.
- Plummer, K. (2022). Sociology: The Basics, Third Edition (Routledge, Oxon).
- Sandberg, B., & Robichau, R. W. (2022). The hybridization of meaningful nonprofit work: An exploratory study of the effects of marketization on nonprofit managers' sense of meaningfulness in work. *Nonprofit and Voluntary Sector Quarterly*, 51(3), 606-632.
- Shinsei Office of Motosu City (2023). Population and Number of Households of Each Address. Retrieved from Motosu City website https://www.city.motosu.lg.jp/000000129.html (In Japanese)
- Shogenji, S. (ed.) (2021). Agricultural of the 21st Century (Baifukan, Tokyo). (In Japanese)

INTERDISCIPLINARY APPROACH TO ECONOMICS AND SOCIOLOGY

- Simón-Moya, V. & Rodríguez-García, M. (2021). The Emergence of Social Entrepreneurship: Individuals and Social Ventures as Agents of Change (Springer, Cham).
- Sueyoshi, T., Qu, J., Li, A., & Liu, X. (2021). A new approach for evaluating technology inequality and diffusion barriers: The concept of efficiency Gini coefficient and its application in Chinese provinces. *Energy*, 15, 121256.
- Terman, J. N., Feiock, R. C., & Youm, J. (2020). When collaboration is risky business: The influence of collaboration risks on formal and informal collaboration. *American Review of Public Administration*, 50(1), 33-44.
- Ravenscroft, S., & Williams, P. F. (2021). Sustaining discreditable accounting research through ignorance: The mainstream elite's response to the 2008 financial crisis. *Accounting, Society and Organizations*, 95, 101280.
- Koike, T. (2020). Why was Retrospective Evaluation Born? ("Retrospective" Evaluation Seminar in Order to Think and Decide by Ourselves No. 2) Retrieved from Fukuoka Prefecture NPO Volunteer Center website: https://www.nvc.pref.fukuoka.lg.jp/files/StrengthDetail_2373_file.pdf (In Japanese)
- Vagner, L., Valaskova, K., Durana, P., & Lazaroiu, G. (2021). Earnings management: A bibliometric analysis, *Economics and Sociology*, 14(1), 249-262. doi: 10.14254/2071-789X.2021/14-1/16
- Xu, H., Zhang, C., & Huang, Y. (2023). Social trust, social capital, and subjective well-being of rural residents: Micro-empirical evidence based on the Chinese General Social Survey (CGSS). *Humanities and Social Sciences Communications*, 10(Article Number 49 (2023)), 1-13. doi: 10.1057/s41599-023-01532-1