

# DISCOVERING THE CONFIGURATIONS OF THE FACTORS AFFECTING THE EFFECTIVENESS OF ODA: APPLICATION OF QCA

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## ABSTRACT

*This paper aims to discover the characteristics of the ODA donor countries which conduct ODA projects effectively and to induce the less effective ODA donor countries to benchmark them so that all ODA donor countries can implement ODA projects effectively and also help all the recipient countries eventually to end their poverties. As time goes on, the size of ODA increases across the globe, and however, there has little studies on how to effectively implement ODA projects, in particular. What should be noted in the field of ODA studies is that each ODA donor country has its own political, social, and policy-related system, resulting in that only one model for benchmarking the effective ODA donor countries is not easy to be constructed. In other words, there should be more than one model to be benchmarked on the part of less effective countries. Against this background, this study attempts to analyse 23 ODA donor countries to find the configurations of the factors affecting the effectiveness of ODA projects. The analysis shows that two combinations of the factors associated with the effectiveness of the ODA projects were found. The first type combination, in which Canada is included, is that the capacity for innovation of government is high, the willingness to delegate power to lower tier is high, the size of the assistance per recipient country is relatively big, the size of the assistance per agency, which is involved in ODA projects, is small, the size of the assistance per ODA project is small. The second type combinations, in which Denmark included, is that the capacity for innovation is high, the willingness to delegate power is high, the size of the assistance per ODA agency is high, the size of the assistance per recipient country is small, and the size of the assistance per ODA project is small. It is suggested that less effective countries regarding ODA project implementation should benchmark one of the two types so that they could be effective in terms of ODA projects implementation.*

**Keywords:** ODA projects, QCA, ODA effectiveness, Dichtomization.

## INTRODUCTION

Official development assistance (ODA) is defined as government aid designed to promote the economic development and welfare of developing countries. Loans and credits for military purposes are excluded. Aid may be provided bilaterally, from donor to recipient, or channelled through a multilateral development agency such as the United Nations or the World

Bank. The OECD maintains a list of developing countries and territories; only aid to these countries counts as ODA. The list is periodically updated and currently contains over 150 countries or territories with per capita incomes below USD 12276 in 2010. A long-standing United National target is that developed countries should devote 0.7% of their gross national income to ODA. This indicator is measured as a percentage of gross national income and million USD prices, using 2014 as the base year (<https://data.oecd.org/oda/net-oda.htm>).

As of 2016, the size of the assistance which is provided by DAC (Development Assistance Committee) member countries in OECD is on average 0.320% of GNI (Gross National Income) of each country. The highest country in terms of the size of the assistance is Norway (1.114%), followed by Luxembourg (1.004%), Sweden (0.937%), Denmark (0.753%), and the UK (0.696%). And Japan (0.203%), and USA(0.181% follows them, and Korea's is 0.139%, relatively low, and reaches approximately 43% of the average score of the DAC member countries (0.320%). However, as the political and economic status of Korea increases over time, it is expected that its assistance size also gets higher and higher in the future (<https://data.oecd.org/oda/net-oda.htm>).

While the size of ODA gets increased over time, issues regarding the effectiveness of the assistance to developing countries have constantly been raised. Those issues are, firstly, the ODA recipient countries have not effectively utilized the assistance from developed countries, and secondly, the donor countries have constantly had problems including problem relating to the fragmented agencies for providing assistance (fragmentation). Korea has played a role in assisting developing countries in earnest since 2010 when it became a member country of DAC. The effectiveness problem relating to ODA projects applies to Korea and it will be challenging to Korea as well in the future.

A policy report published by Centre for Global Development, an international organisation, in 2014 shows that among 30 DAC member countries and international organisations, Korea ranked 26th in terms of the effectiveness of the four domains. Even though Korea's experience of ODA projects is relatively short, the effectiveness problem should be tackled both now and in the future. Against this background, this paper tries to discover the characteristics of the countries which have conducted ODA projects effectively, and to put forward policy suggestions for less effective countries including Korea to be able to benchmark to elevate their effectiveness in carrying out ODA projects

## **OVERVIEW OF ODA**

Institutions providing ODA are generally central government, local government, and public bodies in Korea. From 1945 to 1999 Korea received approximately 12.7 billion US dollars, and however, in 2000 it became OECD DAC member, which means it became ODA donor country as the 24<sup>th</sup> country, rather than recipient country. Since then, Korea has expanded the size of ODA and from 2009 to 2014 its increase rate is 17.8%, and is the ranked the first in terms of its increase rate among 30 member countries. In 2017 its total ODA size has reached approximately 2.48 billion US dollar and 1,295 projects are being implemented in more than one hundred ODA recipient countries.

As the number of ODA projects and the size of ODA have expanded, there has been strong interest in effectiveness of the projects being conducted both home and abroad. In relation to this, a report published by World Bank (1998) argues that ODA projects can be effectively implemented in countries equipped with macroeconomic policies and institutions with good quality, suggesting budget surplus and freedom of trade as good governance. Furthermore, it also argues that the returns of the assistance over a certain threshold can be diminished negatively.

And, the Centre for Global Development (CGD, 2014) publishes a report called *The Quality of Official Development Assistance*. The report, the most recent of which is 2014 report, categorises criteria of effectiveness as 4 domains-maximising efficiency, fostering institutions, reducing burden, and transparency and learning, and ranks DAC countries in terms of effectiveness.

## LITERATURE REVIEW

First, we review the recent trends in ODA studies in Korea. As noted earlier, since 2010 when Korea became a member country of OECD DAC, some studies on ODA have been conducted, however, not significantly many in term of quantity and quality. What is noticeable is that as the size of ODA provided by Korea has expanded, there has been much interest in ODA effectiveness and accordingly evaluation studies on ODA. These trends in it are classified into three. The first one is research category dealing with effectiveness evaluation of ODA projects (Soh, 2012; Choi, 2013; Kim et al., 2006). These studies are based on the secondary data analysis, focusing on the evaluation of ODA effectiveness. The second one is research category regarding evaluation indicator and evaluation method of ODA projects (Kyungwoon Univ, 2008; Park, 2011; Kim, 2015) the third one is research category regarding improving system for effectiveness evaluation of ODA projects (Kim, 2007; Cho, 2013; Hong, 2012). These studies are primarily concerned with fragmentation and overlapping of ODA agencies and projects, lack of coordination of ODA projects and effectiveness of ODA donor countries, which are caused by the increasing size of ODA projects.

On the other hand, ODA studies abroad seem to focus on monitoring system and project evaluation of ODA projects, and in recent time's studies to analyse the characteristics of individual recipient countries have emerged, in the hope that effectiveness of ODA projects can be elevated. In general, studies on ODA which have been conducted abroad can be categorized into two. The first category is the one which deals with how to strengthen the evaluation system of ODA projects (Benson & Jordan, Collier & Mesick, 1975; Department for International Development, 2009; Dolowitz, 2003).

The second one is the one which studies fragmentation, overlapping, and coordination of ODA agencies and ODA projects (OECD, 2003, 2006, 2008; Kindomay & Morton, 2009; CGD, 2014).

As discussed above, most studies on ODA conducted both home and abroad are primarily concerned with ODA effectiveness and evaluation, however, there have been little studies on what factors and what combinations of factors are associated with effectively providing ODA. As ODA donor countries are different from each other in terms of characteristics, there should be more options for the donor countries to follow to elevate their aid effectiveness (Marsh &

Sharman, 2009). That is because, if there are choices more than one for donor countries to benchmark in terms of elevating their aid effectiveness, the donor countries can judge their situations based on the characteristics of the donor countries which are effective in terms of providing ODA, can benchmark a country which is effective and also they think is most similar to them in certain aspects.

### Research Question

Based on the literature review conducted above, this paper puts forward a research question.

<Research question>: What combinations of conditions affect effectiveness of ODA?

## RESEARCH DESIGN

### Countries to be Analysed

As of 2017, the number of OECD DAC member countries is 30. Among these countries, some countries which do not have data of all variables included in this analysis are excluded in the analysis. As a result of that, 23 countries are included in the analysis.

### Analysis Indicators

Data on ODA effectiveness of donor countries, a dependent variable, is obtained by CGD report (2014). The report publishes the Quality of ODA not annually and the third time and it measures four dimensions of each donor country: maximizing efficiency, fostering institutions, reducing burden, and transparency and learning, and ranks them. As the most recent report was published in 2014, and this study uses the 2014 report. The report ranks the donor countries and international organisations providing ODA as well, and then here the international organisations are excluded in the analysis. The analysis method is first to add the ranks of the four dimensions of each country and to divide them by 4, to produce the average rank of each country, and to use its average rank as a value of the dependent variable. Therefore, it means that the lower its average score is, the more effective the country is.

Then, the independent variables here are ODA size per project, ODA size per ODA agency, ODA size per recipient country, willingness to delegate, capacity for innovation, which the authors assume affect ODA effectiveness. The former three variables are related to ODA projects, and the latter two variables are related to government capacity.

Table 1 shows the name of analysis variables, their measurement and their data source.

Table 1			
ANALYSIS VARIABLES			
Variable	Variable explanation	Measurement	Data source

Dependent variable	ODA effectiveness (ODAEFFECT)	the degree of effectiveness of each country in providing ODA	average rank score of each country calculated from dividing total four dimensions' rank score by four	Centre for Global Development (2014)
Independent variable	size per project (ODAPROJ_1)	ODA size per project which donor provides	average ODA size per ODA project calculated from dividing total aids by the number of projects	Centre for Global Development (2014)
Independent variable	size per ODA agency (ODAAGENCY_1)	ODA size per agency involved in ODA project	average ODA size of each agency calculated from dividing total aids by the number of agencies	
Independent variable	size per recipient country (ODARECIP_1)	each recipient country's ODA size receiving from donor country	average ODA size of each recipient calculated by dividing each donor's total ODA by the number of recipient countries which each donor provides	
Independent variable	willingness to delegate (DELAGE_1)	government' willingness to delegate authority to lower tier organisation	World Competitiveness Report score (1-7) (1: Lowest, 7: Highest)	2016 World Competitiveness Report(2016)
Independent variable	capacity for innovation (INNOVATI_1)	government's capacity to innovate society in general	World Competitiveness Report score (1-7) (1: Lowest, 7: Highest)	2016 World Competitiveness Report(2016)

Note: Letter below variable name is an abbreviation of each variable used in the analysis

## METHODOLOGIES

The analysis subjects of this research are the 23 countries belonging to OECD DAC. For the analysis, Qualitative Comparative Analysis (QCA) is employed. QCA is a comparative technique (Rihoux, 2006) that is used to explain large social events concisely by using a small number of cases (5-55). Although QCA does not provide statistical results for generalization, it is a useful method that categorizes cases by their characteristics in a simple manner (Poveda, 2013; Rihoux, 2006). QCA, developed by Ragin (1987), has not provoked much interest until now. The main purpose of this method is to provide meaningful and concise interpretations on the causal patterns of the cases that are examined. This method aims to find the various causal conditions or condition factors that can fundamentally affect the result. That is, it begins with the assumption that one outcome does not belong to a set of one variable, but can belong to a set of many variables (Wiechula, 2012; Wiechula, 2013; Rihoux, 2006). Other characteristics of this methodology are the use of set theory, Boolean algebra, its formation of a truth table, and a concise approach to research data (Donnelly, 2013). The QCA method is of three broad kinds: crisp set QCA (CSQCA), fuzzy set QCA (FSQCA), and multi-value QCA (MVQCA). This research will use CSQCA, since this method processes data by changing independent variables and dependent variables into 0 or 1 according to a certain threshold. It is more convenient to set a threshold and categorize the independent values that affect the effectiveness of ODA projects included in this research into 0 and 1. This research will use the CSQCA and the TOSMANA program for analysis.

## ANALYSIS

### Descriptive Statistics

Table 2 shows the basic statistics of the ODA related-variables of 23 countries for overview.

Donor country	ODA size (million US dollar)	Number of recipient countries	Number of ODA agencies	Number of ODA projects	Population (million)	Willingness to delegate	Capacity for innovation	ODA effectiveness (average rank score)
Austria	1,106	113	12	233	8.5	4.7	5.4	19.5
Australia	5,403	137	2	283	23.6	4.9	4.8	26
Belgium	2,315	100	9	170	11.2	5.1	5.3	24
Canada	5,650	121	6	679	35.5	5.1	4.9	11.25
Denmark	2,693	83	1	358	5.6	6.1	5.3	8.5
Finland	1,320	115	3	63	5.5	5.6	5.6	13.5

France	12,028	132	11	1,180	63.9	3.9	5.1	18.25
Germany	12,939	132	8	1,975	81.1	4.9	5.6	19.75
Greece	327	96	7	33	11	3.6	3.4	18.5
Ireland	808	91	1	378	4.6	4.9	5.2	2.5
Italy	2,737	107	4	203	60	3.1	4.5	23.75
Japan	10,605	143	7	963	127.1	4.7	5.3	16.75
Korea	1,597	133	4	282	50.4	3.8	4.8	26
Luxembourg	399	91	1	196	0.6	5	5.4	20
Netherlands	5,523	87	1	314	16.9	5.7	5.2	18
New Zealand	449	66	1	142	4.5	5.5	5.3	13.75
Norway	4,753	112	5	787	5.2	6	5.2	18
Portugal	581	57	3	15	10.4	3.6	4.5	16.5
Spain	2,037	96	16	633	46.5	3.5	4.1	18.5
Sweden	5,240	113	2	623	9.7	5.6	5.7	11.75
Switzerland	3,045	115	5	554	8.1	5.3	6	23.25
United Kingdom	13,892	135	10	849	64.5	5	5.4	11
United States	30,687	137	21	3,431	319	5.2	5.9	22.5

Note1: Score of willingness to delegate and capacity for innovation are ranged from 1 (lowest) to 7 (highest), World Competitiveness Report (2016)

Note 2: ODA effectiveness score is based on the result of the Centre for Global Development (2014), and it means that the lower its rank score is the more effective the country is.

Table 3 shows the general information of the variables included in the analysis. These data are dichotomized for analysis.

Table 3						
VALUE OF INDEPENDENT AND DEPENDENT VARIABLES						
	size per recipient country	size per ODA agency	size per project	willingness to delegate	capacity for innovation	ODA effectiveness
Australia	39.44	2701.5	19.09	4.9	4.8	19.5
Austria	9.79	92.17	4.75	4.7	5.4	26
Belgium	23.15	257.22	13.62	5.1	5.3	24
Canada	46.69	941.67	8.32	5.1	4.9	11.25
Denmark	32.45	2693	7.52	6.1	5.3	8.5
Finland	11.48	440	20.95	5.6	5.6	13.5
France	91.12	1093.45	10.19	3.9	5.1	18.25
Germany	98.02	1617.38	6.55	4.9	5.6	19.75
Greece	3.41	46.71	9.91	3.6	3.4	18.5

Ireland	8.88	808	2.14	4.9	5.2	2.5
Italy	25.58	684.25	13.48	3.1	4.5	23.75
Japan	74.16	1515	11.01	4.7	5.3	16.75
Korea	12.01	399.25	5.66	3.8	4.8	26
Luxembourg	4.38	399	2.04	5	5.4	20
Netherlands	63.48	5523	17.59	5.7	5.2	18
New Zealand	6.8	449	3.16	5.5	5.3	13.75
Norway	42.44	950.6	6.04	6	5.2	18
Portugal	10.19	193.67	38.73	3.6	4.5	16.5
Spain	21.22	127.31	3.22	3.5	4.1	18.5
Sweden	46.37	2620	8.41	5.6	5.7	11.75
Switzerland	26.48	609	5.5	5.3	6	23.25
United Kingdom	102.9	1389.2	16.36	5	5.4	11
United States	223.99	1461.29	8.94	5.2	5.9	22.5

As shown in Table 4, there are five independent variables-sizes per project (ODAPROJ\_1), agency (ODAAGENCY\_1), size per recipient country (ODARECIP\_1), willingness to delegate (DELAGE\_1), capacity for innovation (INNOVATI\_1)-and one dependent variable, ODA effectiveness (ODAEFFECT). It is hypothesized that the five independent variables can affect a dependent variable.

## DICHOTOMIZATION

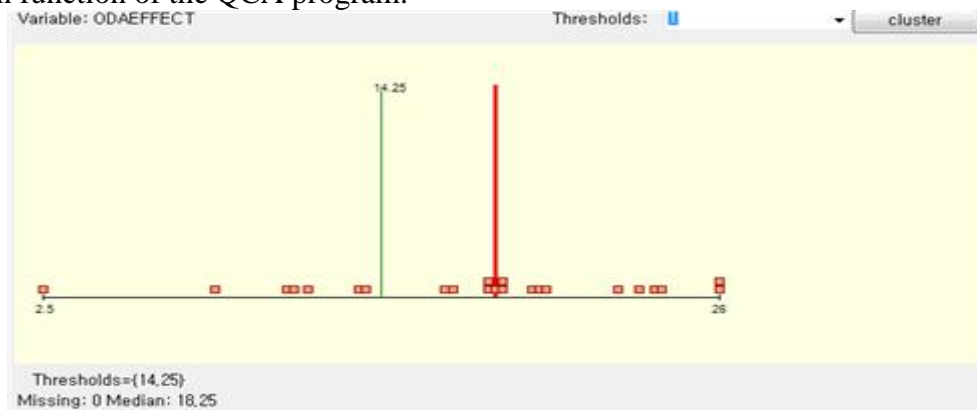
Table 4 shows the dichotomized value (0 or 1) of each variable. Here, 1 means positive (present) whereas 0 means negative (absent). For example, in Australia in Table 4, 1 in the variable INNOVATI\_1 means that Australia's capacity for innovation is high, while in Greece, 0 in the variable INNOVATI\_1 means that Greece's capacity for innovation is low. Likewise, 23 countries which have provided ODA as DAC member country were dichotomized by according the value 1 or 0 to each variable. A rationale for this is provided by Rihoux (2006), who notes that 'QCA is in essence a case sensitive approach', where 'the use of QCA is an iterative and creative process'. The emphasis of the present research is on reaching an analytical generalization related to ODA effectiveness. With values of [0] and [1] having been assigned to the ODA effectiveness conditions, the 23 countries can then be classified on the basis of the ODA quality report, resulting in a dichotomization table (Table 4).

<b>DICHOTOMIZATION OF VARIABLES BY 1 OR 0</b>						
<b>COUNTRY</b>	<b>ODAEFFEC T_1</b>	<b>INNOVA TI_1</b>	<b>DELAGAT E_1</b>	<b>ODARECIP _1</b>	<b>ODAAGENC Y_1</b>	<b>ODAPR OJ_1</b>
Australia	0	1	1	0	1	1
Austria	0	1	1	0	0	0
Belgium	0	1	1	0	0	1
Canada	1	1	1	1	0	0



Denmark	1	1	1	0	1	0
Finland	1	1	1	0	0	1
France	0	1	0	1	0	0
Germany	0	1	1	1	1	0
Greece	0	0	0	0	0	0
Ireland	1	1	1	0	0	0
Italy	0	0	0	0	0	1
Japan	0	1	1	1	1	1
Korea	0	1	0	0	0	0
Luxembourg	0	1	1	0	0	0
Netherlands	0	1	1	1	1	1
New Zealand	1	1	1	0	0	0
Norway	0	1	1	0	0	0
Portugal	0	0	0	0	0	1
Spain	0	0	0	0	0	0
Sweden	1	1	1	1	1	0
Switzerland	0	1	1	0	0	0
United Kingdom	1	1	1	1	1	1
United States	0	1	1	1	1	0

In this analysis, the threshold to divide each value into 1 or 0 is produced by using calibration function of the QCA program.



**FIGURE 1**  
**EXAMPLE OF PRODUCING THE THRESHOLD OF THE VARIABLE ODAEFFECT**

Note: The median of the variable ODAEFFECT is 18.25; however, its threshold for 1 or 0 is 14.25 as indicated in Figure 1.

Likewise, other variables' thresholds are produced by using the calibration function of the QCA software.

### TRUTH TABLE ANALYSIS AND DISCUSSION

With values of [0] and [1] having been assigned, 23 ODA donor countries can then be recorded, resulting in a truth table (Table 5). Qualitative Comparative Analysis focuses on the construction and minimization of truth tables. The truth table lists every unique configuration of independent variables found in the data, along with the number of 0, 1, and don't-care (-) cases associated with the configuration. The value of the dependent variable for a configuration is a function of the distribution of 0, 1 and don't-care cases. If a configuration occurs in the data with both 0 and 1 values on the dependent variable, QCA treats it as a contradiction and assigns to the dependent variable the value C. Otherwise, QCA assigns to the dependent variable for a configuration the value 0 (only 0 and don't-care cases exist), 1 (only 1 and don't-care cases exist), or - (only don't-care cases exist).

TABLE 5						
TRUTH TABLE ANALYSIS						
V1: INNO VATI_ 1	V2:DELAGA TE_1	V3:ODAREC IP_1	V4:ODAAGEN CY_1	V5:ODAPROJ_ 1	0:ODAEFF ECT_1	ID:COU NTRY
1	1	0	1	1	0	Australia
1	1	0	0	0	C	Austria, Ireland, Luxembo urg, New Zealand, Norway, Switzerla nd
1	1	0	0	1	C	Belgium, Finland
1	1	1	0	0	1	Canada
1	1	0	1	0	1	Denmark
1	0	1	0	0	0	France
1	1	1	1	0	C	Germany , Sweden, USA
0	0	0	0	0	0	Greece, Spain
0	0	0	0	1	0	Italy, Portugal
1	1	1	1	1	C	Japan, Netherla nds, UK
1	0	0	0	0	0	Korea

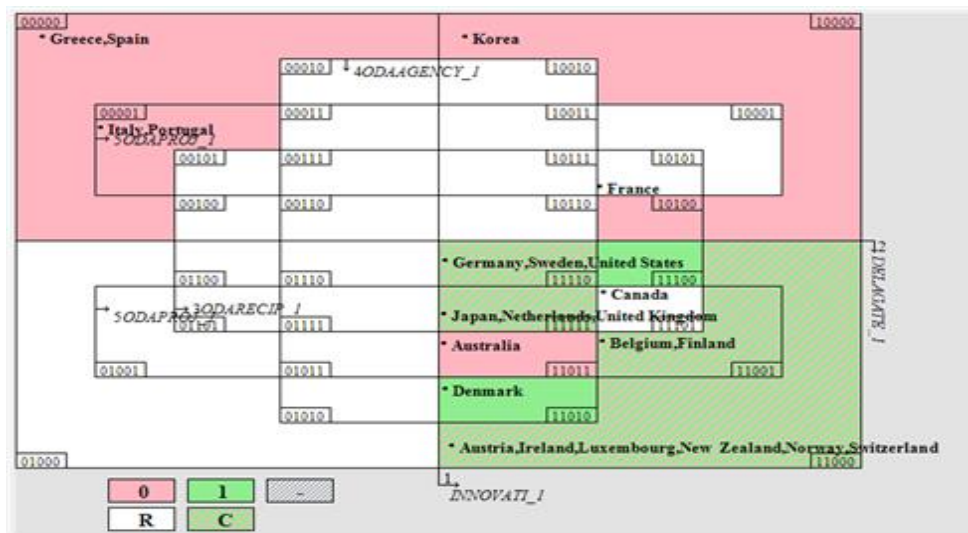
In a truth table produced by using the TOSMANA 1.3 program, various conditions can be compared against each other and, ideally, against an outcome, the ODA effectiveness. Venn diagrams illustrate the logical relationships between conditions. Each space in a diagram can be colour coded, shaded or patterned. Figure 1 is a graphical depiction of the configurations from the truth values presented in Table 5 and was produced by TOSMANA 1.3’s ‘visualizer’ tool.

Table 5 shows that there two configurations leading to the effectiveness of ODA projects as below.

INNOVATI\_1\*DELAGATE\_1\*ODARECIP\_1\*odaagency\_1\*odaproj\_1+  
 INNOVATI\_1\*DELAGATE\_1\*odarecip\_1\*ODAAGENCY\_1\*odaproj\_1

Configuration 1 is a combination of conditions where a country’s capacity for innovation (INNOVATI\_1) is high, willingness to delegate (DELAGATE\_1) is high, each recipient country’s ODA size receiving from donor country is high, ODA size per agency involved in ODA project (ODAAGENCY\_1) is low, and ODA size per project which donor provides (ODAPROJ\_1) is low. Here, capital letter of each variable means it is high, whereas small letter of each variable means it is low. Canada meets this configuration 1.

Configuration 2 is a combination of conditions where each country’s capacity for innovation (INNOVATI\_1) is high, willingness to delegate (DELAGATE\_1) is high, each recipient country’s ODA size receiving from donor country is low, ODA size per agency involved in ODA project (ODAAGENCY\_1) is high, and ODA size per project which donor provides (ODAPROJ\_1) is low. Denmark meets this configuration 2.



**FIGURE 2**  
**VENN DIAGRAM SHOWING THE EFFECTIVENESS OF ODA DONOR COUNTRIES**

In Figure 2, [1], or a positive outcome, is shaded green; [0], or a negative outcome, is shaded lilac; and [C], or contradictory configurations, are patterned with green and lilac stripes, Contradictory configurations occur in cases where some combinations of conditions result in a [0] outcome but others result in a [1] outcome (Wiechula, 2012). Blank white spaces are logical

remainders [R], or combinations of conditions that have not been observed. For example, in the lower left space the notation 01000 highlights the absence of any combination of conditions associated with a positive outcome. Table 5 and Figure 2 show two configurations associated with the effectiveness of ODA donor countries. In sum, these two prime implicates are combinations of important conditions determining the effectiveness of ODA donor countries.

What does this result mean to policy-makers in the donor and recipient countries? Firstly, some less effective ODA donor countries including Korea need to pay more attention to the two combinations of conditions, checking each ODA project prior to its implementation to ascertain whether they are equipped with either configuration 1 or configuration 2, as suggested in Table 5, and monitoring to ensure that these configurations are met, and so on. Secondly, it is also necessary for the international organisations like OECD DAC to support the less effective ODA donor countries to be equipped with one of the two configurations, with a focus on the establishment of the appropriate conditions. It is also important that we understand that one of the two combinations of conditions may be enough to make each ODA donor country successful in terms of its ODA project implementation in developing countries; this means that either configuration 1 (INNOVATI\_1\*DELAGATE\_1\*ODARECIP\_1\*odaagency\_1\*odaproj\_1) or configuration 2 (INNOVATI\_1\*DELAGATE\_1\*odarecip\_1\*ODAAGENCY\_1\*odaproj\_1) is necessary in order for the less effective ODA donor countries to successfully implement the projects in developing countries. Hence it can be said that policy-makers involved in ODA projects have more policy flexibility in designing their ODA governance, in the sense that they can pay attention to whether their ODA project is being implemented with one of the two configurations rather than with all two.

## CONCLUSION

This article emphasizes the importance of conditions affecting the ODA effectiveness and attempts to provide information to ODA donor countries which are less effective in providing aids to developing countries, so that they can benchmark more effective countries with sufficient conditions necessary for effectively and efficiently assisting developing countries. For this purpose, this paper describes the usefulness of QCA in examining which causal conditions can influence the ODA effectiveness, and attempts to discover configurations associated with ODA effectiveness. In this analysis, two configurations affecting ODA effectiveness were derived. Among 23 OECD DAC member countries, only two countries-Canada and Denmark-are included in one of the two configurations. Configuration 1 is a combination of conditions in which Canada is included. Its conditions are that a country's capacity for innovation (INNOVATI\_1) is high, willingness to delegate (DELAGATE\_1) is high, each recipient country's ODA size receiving from donor country is high, ODA size per agency involved in ODA project (ODAAGENCY\_1) is low, and ODA size per project which donor provides (ODAPROJ\_1) is low and, configuration 2 is a combination of conditions in which Denmark is included. Its conditions are that each country's capacity for innovation (INNOVATI\_1) is high, willingness to delegate (DELAGATE\_1) is high, each recipient country's ODA size receiving from donor country is low, ODA size per agency involved in ODA project (ODAAGENCY\_1) is high, and ODA size per project which donor provides (ODAPROJ\_1) is low.

Finally, before implementing ODA projects in overseas countries, it is necessary for ODA donor countries to consider whether sufficient conditions are met by them for their projects to be conducted satisfactorily. The analysis results presented here show that if the one of the two specified conditions is not met at the site, the success of the ODA project cannot be guaranteed. In addition, it is necessary for policy-makers engaged in ODA projects home and abroad to place more emphasis on the two configurations for the ODA effectiveness in providing aids to developing countries.

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