The Impact of Village Fund Program on Improving Well-being

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Abstract

Laws no. 6 of 2014 concerning villages has placed villages at the forefront of development and improvement of community welfare. Villages have been given adequate authority and availability of Village Funds, so that it can manage the village's potential, solve problems, economic growth, and improve welfare in the village. Researchers will measure changes in expenditure per capita of the population before and after the implementation of the Village Fund program by conducting statistical analysis on secondary data from 432 districts as a research sample. From the results of analysis using regression panel data, it shows that the intervention of the Village Fund has a positive influence on the increase in expenditure per capita of the rural population. In addition, this study also found that the magnitude of the influence of the Village Fund intervention on per capita expenditure varies by region type. First, an increase in per capita expenditure was found to be greater with better village infrastructure conditions compared to areas with poor village infrastructure. Second, the same pattern was also found in regions with low poverty rates compared to regions with high poverty rates. Expenditures per capita rates found higher in regions with low poverty rates compared to regions with high poverty rates.

Key words: Village fund, Per capita expenditure, before and after, SUSENAS

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INTRODUCTION

The role of the village government in development planning before the village fund program was not synergized with the central government. This creates delays or obstacles in developing the village. According to (Tindi, 2019) the factors that encourage delays in village development are due to the lack of potential human resources, the mentality of the apparatus in carrying out their main duties and obligations, lack of service facilities and infrastructure, remote villages and lack of funds. Because these conditions prompted the government to present a village fund program to answer village development problems. With the allocation of village funds, service facilities and infrastructure will be better, including the development of human resources, both officials and village communities.

Currently, the village has an active role in development. The indicators of the active involvement of the village government in development according to (Dahlan et al., 2012) include the village government facilitating village meetings, transparency and support for local community organizations (CSOs). The village government emphasizes community involvement in rural infrastructure development programs.

Villages are representative of the smallest legal community that existed and grows along with the history of Indonesian people’s lives and becomes an inseparable part of the life structure of the Indonesian people. As a form of State’s recognition of the village, the government classifies the functions and authority of the villages, and strengthens the village’s positions and the village community as the subject of development, which is realized by the stipulation through Laws no. 6 of 2014 concerning Villages. So that village funds are expected to; (i) improve public service in the villages, (ii) reduction poverty, (iii) growth economic development, (iv) addressing development disparities between villages, and (v) strengthening village community as development subjects. Of course, these hopes, and goals cannot be realized in short time, but the certainty of funding sources for development in the village through the Village Fund can accelerate the achievement of these goals.

The budget for village funds has increased both in total value and in number of recipient villages (table 1). Village funds, which distributed for the first time in 2015 and until 2019, the government has provided funds sourced from the State Revenue and Expenditure Budget (APBN) to reach IDR 257 trillion, with the number of villages reaching 74,954, then the average village funds that villages received is ± IDR 938 million. During that 4 years village fund has been used for village development activities (infrastructures) and empowering communities in the village that can provide a better life and welfare for the people in the village. In 2019, however, the use of village fund is shifted more for economic and community empowerment for villages with good infrastructure facilities.

In 2019, each village received an average of IDR 672,421,000 or a total of IDR 60.4 trillion. The remainder is allocated proportionately to villages based on population, poverty level, geographic difficulty level and area size, as well as villages with underdeveloped status. Village funds are able to build facilities and infrastructure to support community economic activities. The bridge has grown to 1,140,378 meters, village roads are 191,600 kilometers, village markets have almost reached 9,000 units, BUMDes (village-owned enterprises) activities are 37,830 units, village reservoirs are 4,175 units, and irrigation facilities are 58,931 units. In addition, village funds have also built infrastructure to support the quality of life of
rural communities through the construction of 959,569 clean water facilities, 240,587 toilets, and 29,557,922 meter drainage (Kompas, 2019).

Table 1. Budget of Village Fund and Average Allocation per Village

| Year | Budget of Village Fund (IDR Trillion) | Number of Village | Average funds/village |
|------|---------------------------------------|-------------------|----------------------|
| 2015 | IDR 20.67                             | 73,929 units      | IDR 280 million      |
| 2016 | IDR 46.98                             | 74,571 units      | IDR 630 million      |
| 2017 | IDR 59.72                             | 74,650 units      | IDR 800 million      |
| 2018 | IDR 59.90                             | 74,782 units      | IDR 801 million      |
| 2019 | IDR 70.00                             | 74,953 units      | IDR 938 million      |

Source: Ministry of Finance

Along with the increase in facilities and infrastructure, the number of poverty in Indonesia has decreased. In 2020, village funds are expected to empower the community to improve the economy. However, COVID 19 seems to be tearing apart the joints of the economy. Funds that were supposed to be for village development, be partially diverted to overcome the pandemic.

Table 2. Comparison of Life Quality in Village

| Description                        | 2014    | 2017    |
|------------------------------------|---------|---------|
| Rural inequality ratio            | 0.34    | 0.32    |
| The number of poor in rural       | 17.7 million | 17.1 million |
| Percentage of the poor            | 14.09%  | 13.9%   |

Source: Ministry of Finance

Table 1 shows that village funds have increased significantly from 2015 to 2017. The village fund budget in 2015 amounted to IDR 20.67 trillion to IDR 59.72 trillion or an increase of 188.92 percent in 2017. Basic infrastructure has increased as well as life quality (table 2). Thus, along with increasing village funds, it is hoped that it will increase the welfare of the per capita community. The amount of village fund allocated for each district differs based on an index of geographic difficulties, poverty levels and underdeveloped areas. This additional fund is expected to increase the amount of consumption per capita.

But the question is whether the authority and fund source (village funds) that have been guaranteed by the Law provide a positive correlation to the improvement of rural community welfare, in this case in per capita consumption of the community in the village. Starting from the description above, this concise study aims to answer these questions or at least be able to provide a picture of the situation that occurred and took place in the village. In general, this study aims to see the results and changes that occur before and after the Village Funds intervention. Specifically, what this study wants to achieve is to identify effect of the village fund on improving welfare...
through community’s consumption grow in the village.

**RESEARCH METHODS**

To see how the implementation of Village Fund affects changes in community welfare, researcher need two kind of data; 1) data on community welfare that represented by per capita consumption and poverty level, and 2) data on village fund distributed in series from the first year 2015 to 2018. This research data is secondary data. Data related to per capita consumption was obtained from National Socio-Economy Survey (SUSENAS) which is a large-scale and representative survey of Indonesia conducted by Central Bureau of Statistics (BPS). SUSENAS data cover various aspects of socioeconomics and fulfillment of life needs such as clothing, food, shelter, education, health, safety, and employment opportunities with a sample of more than 1,000,000 individuals in 200,000 households (RT) while the village fund distribution data per district was obtained from the Ministry of Finance.

Data of village fund distribution from the Ministry of Finance is only available at the district level, so the analysis unit that can be used in this study is the district level, or more precisely with a total of 432 regencies in Indonesia. To get strong analysis results, researchers used an analysis strategy by dividing the sample into smaller parts. Distribution of the sample is done by looking at several characteristics, namely, (i) Geographical Difficulty Index (Indeks Kesulitan Geografis or IKG), (ii) poverty level, and (iii) district location. Distribution of the number of observations of districts or cities that have been divided by characteristics, in more detail can be seen in figure 1.

![Figure 1. Distribution of the number of district/city observations used in the study based on three predetermined categories: regional region; poverty level; and geographical difficulty index (IKG)](image)

Based on district location, it is divided into 3 regions, namely Java consisting of 86 districts, Sumatra 130, Kalimantan and eastern Indonesia 216 districts. In general, people differentiate into two parts, namely Western Indonesia (Java and Sumatra) and Eastern Indonesia. Secondly, it is grouped based on poverty levels, namely districts with poverty levels below 10%, districts with poverty levels between 10% - 14%, and districts with poverty rates of more than 14%. The third grouping is based on the geographic difficulty index (IKG), namely IKG above 60, IKG between 40-60 and IKG below 40.

To see the effect of village fund program existence, researcher use 3 years of data, which is 2014 as a baseline when village fund had not been implemented, 2017 as the midline, and 2018 as the end line. This study uses panel data regression to analyze the impact of village fund before-after. Before-after analysis is carried out to see how its difference occurs. The model specifications used in this study are as follows:
Per capita consumption (IDR)_{it} = a + \beta per capita village fund + \delta X_{it} + \gamma year + \varepsilon_{it} \quad (1)

Where \( \alpha \) is a constant which is the level of per capita consumption when not affected by any factors. \( \beta \) is coefficient of per capita village fund variable or can be interpreted as the determinant of village fund program on per capita consumption. \( X_{it} \) is a number of variables that are used as controls in district \( i \) in year \( t \) to get better estimation results including: average age of Head of Household (KRT); dependency ratio, Average Length of School (RLS); Life Expectancy (AHH); Human Development Index (HDI); percentage of KRT employment; percentage of recipients of social assistance programs such as rice for the poor (RASKIN), hope family program (PKH), aid for the poor student (BSM), insurance program for the poor (BPI BPJS), health insurance program from local government (Jamkesda), microfinance program (KUR); the percentage of households (RT) with proper drinking water, electricity, toilets, proper toilets, and septic tanks. \( \gamma \) year is a year dummy variable and \( \varepsilon_{it} \) is an error value.

The most effective and commonly used method in evaluating the impact of a program is the Randomized Controlled Trial (RCT) or Propensity Score Matching (PSM) conducted by (Farida et al., 2016) which measures the impact of microfinance on income. PSM is an experimental way by randomizing program interventions and dividing sample groups into treatment and control groups to overcome selection bias problems and ensure that the impacts found are only due to the intervention of the program. However, this method cannot be applied to evaluate the Village Fund program, because from the beginning the implementation of the Village Fund program was regulated through Government Regulation No. 60 of 2014 (updated by Government Regulation No. 8 of 2016 as the second amendment) and governed by the Regulation of the Minister of Finance number: PMK 247/PMK.07/2015, in the implementation of the Village Fund given to all villages and including all existing villages in all Indonesia. With this government policy, in this study there is no control group data (because all observations are treatments), so the method that can be used in this study is to use a before-after analysis using panel data regression.

Using the data and analysis methods presented above, this study has several limitations. However, at least the results of the study can be used to conclude whether the direction of influence the Village Fund program is as expected or not.

RESULTS AND DISCUSSION

At the beginning of this section, a descriptive analysis of the data used on socioeconomic characteristics and how changes occurred from 2014 to 2018 will be explained. Next, the results of the panel regression estimation will be carried out and how these results can answer the research objectives. Finally, it will explain how the estimation results are indeed relevant to previous studies or to what is happening in Indonesia.

Judging from table 3 using descriptive analysis we found that on average, welfare levels in all districts in Indonesia increased. This can be seen from the per capita consumption which increased from approximately IDR\text{	extcurrency}781,607.70 in 2014 to IDR\text{	extcurrency}892,775.50 in 2017 and steadily increased to IDR\text{	extcurrency}974,693.70 in the following year. An increase in per capita consumption indicates increased welfare. Except for those who experience an increase in preferences and a broader transformation of consumption, this
increase in consumption does not always mean that consumption growth results in increased welfare (Witt, 2016). Likewise, research (Aftab et al., 2017) in the most populous South Asian countries (Pakistan, India, Bangladesh) that consumption expenditure increases due to rising prices of goods, does not show an increase in people's welfare. To measure the effect on consumer welfare requires estimation of price elasticity. Basic food staples such as wheat and rice are relatively inelastic to prices. However, for the poor, there is still an influence with the increase and change in the relative price of food (Attanasio et al., 2013). The government's policy through the conditional cash transfer program was able to overcome the impact of price increases. There are also alternative policies that can be implemented, such as price subsidies that distort prices, but are relative and not well targeted.

### Table 3. Descriptive Statistics

| Description                                      | Obs | Mean 2014     | Mean 2017     | Mean 2018     |
|--------------------------------------------------|-----|---------------|---------------|---------------|
| Per capita real consumption expenditures         | 432 | 78,107.70     | 89,275.50     | 97,493.70     |
| Poverty rate                                     | 432 | 14.16         | 14.10         | 13.39         |
| Village funds per capita                          | 432 | -             | 20,292.20     | 85,308.50     |
| Average age of head of household (hh)            | 432 | 46.32         | 47.29         | 47.57         |
| The average age of the head of the house ladder squares | 432 | 21.55.48      | 22.46.46      | 24.48.43      |
| Dependency ratio                                  | 432 | 47.41         | 41.54         | 50.77         |
| Average length of school                          | 432 | 7.24          | 7.55          | 7.66          |
| Numeral hope alive                                | 432 | 67.96         | 68.36         | 68.57         |
| Human Development Index (IPM)                     | 432 | 64.84         | 66.52         | 67.18         |
| % of hh work in agricultural                      | 432 | 57.78         | 56.51         | 54.99         |
| % of hh work in the mining&quarrying             | 432 | 47.30         | 21.18         | 2.14          |
| % of hh work in the industrial sector             | 432 | 4.51          | 5.25          | 5.17          |
| % of hh work in sector electricity&gas            | 432 | 0.19          | 0.51          | 0.21          |
| % of hh work in the construction sector           | 432 | 6.57          | 5.92          | 6.30          |
| % of hh work in sector trade, restaurant, accom.  | 432 | 7.87          | 8.56          | 8.76          |
| % of hh work in transp., Warehouse, comm.         | 432 | 3.28          | 3.31          | 3.31          |
| % of hh work in finance, real estate, business,etc | 432 | 0.20          | 0.64          | 0.54          |
| % of hh who work in the Service, Social, ind.     | 432 | 9.70          | 8.73          | 9.96          |
| Percentage of raskin recipients                   | 432 | 55.02         | 43.08         | 46.57         |
| Percentage of PKH recipients                      | 432 | 2.92          | 7.79          | 1.09          |
| Percentage of BSM recipients                      | 432 | 11.40         | 12.74         | 14.68         |
| Percentage of BPI BPJS membership                 | 432 | 36.21         | 39.69         | 0.45          |
| Percentage of JAMKESDA Recipients                 | 432 | 11.30         | 20.19         | 19.17         |
| Percentage of KUR Recipients                      | 432 | 1.47          | 5.13          | 6.62          |
| % of household with healthy drinking water        | 432 | 72.15         | 55.42         | 39.01         |
| percentage of household with electricity          | 432 | 87.75         | 91.81         | 84.99         |
| percentage of household with toilet               | 432 | 61.10         | 68.24         | 78.03         |
| percentage of household with decent closet        | 432 | 58.34         | 64.99         | 68.19         |
| percentage of household with septic-tank          | 432 | 46.09         | 51.59         | 67.22         |
| district / city GRDP                              | 432 | 12149.36      | 12149.36      | 11925.34      |
Increased welfare can also be seen from the reduction in the poverty rate from 14.16% in 2014 to 14.10% in 2017 and 13.39% in 2018. The analysis also shows that: (i) improvement in quality in several other socioeconomic variables, such as decreased dependency ratio indicating an increase in the productive population, (ii) an improved average school length indicates a more inclusive quality of education, and (iii) an increased life expectancy indicates an increase in terms of health quality. The poverty rate in Indonesia before the village fund program and after the village fund was in place showed a significant decrease. The combination of village funds and poverty alleviation programs can be synergized with the adoption of programs such as supplemental security programs for low-income elderly families and low-income families with members with disabilities. Programs like this are an old form of assistance, but are still in effect today (Haveman et al., 2015).

In line with the increase in the indicators of life age expectation, education and per capita income, the human development index as a composite index of the three indicators also shows an increase. This well-known composite index encompasses only three rather basic aspects of human welfare, however (Ranis et al., 2006) develop eight indicators are highly correlated with the HDI. This study finds that under-five mortality rates work just as well as the HDI, and per capita income is less representative of other dimensions of human development. In 2014 the human development index was 64.84, prior to the village fund program. Two years after the village fund was distributed, the human development index increased to 66.52 in 2017, and continued to increase to 67.18 in 2018. Study (Amaluddin et al., 2018) in West Seram Regency-Maluku Province, revealed that the human development index indicators have negative relationships and significant effect on poverty rate.

To find out whether the increase in welfare is the effect of the implementation of the Village Fund program and also an increase in its budget from 2015 to 2018, this study uses panel data regression with the Fixed Effect model to overcome potential time-invariant heterogeneity problems. From the estimation results (see Appendix 2A to 2C), using a complete sample in 432 districts/cities, it was found that the variable Village Fund per capita has a positive relationship with the level of welfare represented by the value of consumption per capita. This study is in line with Sutikno and Suliswanto (2018) that village fund allocation for infrastructure has encouraged the growth of the real sector business in village. To be more specific, namely with a significance level of 5% and control the influence of other variables assumed constant, for each additional per capita village fund of IDR1,000,000 on average will affect the consumption per capita of IDR37,000. This model has an R-squared value of 0.596, which means that 59.60% of the variation of the per capita consumption variable can be explained by the independent variables in the model, and the remaining 40.40% is explained by other factors outside the model (unobserved). Summary of panel estimation result in table 4.

Estimation results using all district or cities observations in table 4 are also generally in line with estimation results when using a smaller subset of samples. For example, when using a subset set of 216 districts or cities located on the island of Kalimantan and Eastern Indonesia it was found that with a significance level of 10% and controlling for other factors assumed constant, for each additional village fund per capita of IDR1,000,000 on average would increase per capita consumption by
IDR\textsubscript{54,000}. Similarly, when using a sub-set sample districts or cities with an average IKG of a village above 40 and less 60 or classified as difficult, the estimation results show that with a significance level of 10\% for each additional per capita village fund of IDR\textsubscript{1,000,000} on average it will affect an increase in per capita consumption of IDR\textsubscript{51,000}. Estimation results with other subset samples such as districts or cities with a poverty rate were below 10\%, between 10\% and 14\%, more than 14\%, located on the island of Sumatra, and districts or cities located on the island of Java also have a direction a similar but not statistically significant relationship.

Table 4. District/city panel estimation results (2014-2018)

| Coefficient | Se |
|-------------|----|
| ALL DISTRICT** | 0.037 (0.016) |
| District with average IKG more than 60** | -0.124 (0.059) |
| District with average IKG more than 40 and less than 60* | 0.051 (0.027) |
| District with IKG less than 40 | -0.003 (0.020) |
| District with poverty rate in 2014 less than 10\% | 0.015 (0.022) |
| District with poverty rate in 2014 (10\% < p < 14\%) | 0.035 (0.023) |
| District with poverty rate in 2014 more than 14\% | 0.012 (0.027) |
| Districts in Sumatra | 0.039 (0.049) |
| Districts in Java | 0.021 (0.019) |
| Districts in Kalimantans and Eastern Indonesia* | 0.054 (0.029) |

*** \( p < 0.001 \)  ** \( p < 0.05 \)  * \( p < 0.1 \)

Although in general the direction of the relationship of the variable village funds per capita to consumption per capita in various models of subset samples is in accordance with the hypothesis, but there are still results that are not appropriate, for example when using a subset of district / city samples with an average IKG more than 60, the results show that the variable village funds have a negative relationship (\(-\)), to per capita consumption where, with a significance level of 5\%, for each additional per capita village fund of IDR\textsubscript{1,000,000} will affect the decline in per capita consumption by IDR\textsubscript{124,000}. In addition, the estimation results using a subset of sample districts or cities that have an average IKG below 40 (more accessible) also show the opposite, that village funds per capita have a negative relationship to per capita consumption (not significant).

The finding that the Village Fund program has an effect on increasing consumption per capita can be explained because basically, since the beginning of the implementation of this program there are two priorities for the use of village funds, namely; (i) physical infrastructure development and (ii) village community empowerment (Kemenkeu, 2017). As published on the website of the Ministry of Villages, the Development of Disadvantaged Regions and transmigration of the Republic of Indonesia mentioned that during the 4 years of the Village Fund program, many physical infrastructures have been built, generally in the form of facilities and infrastructure to support village economic activities, such as the construction of \( \pm 1,140,378 \) meters of bridges, \( \pm 191,600 \) kilometers village roads, the number of retention basin built \( \pm 4,175 \) units and irrigation facilities built \( \pm 58,931 \) ml. Indirectly, infrastructure development such as roads and irrigation units in villages can be said to increase the consumption per capita of the community, with the construction of supporting infrastructure for economic activities will
increase community productivity both in terms of agriculture and non-agriculture, which will likely lead to increased economic activity in villages that will eventually increase per capita consumption (Ali & Pernia, 2003). However studied by Arma, et al., (2018) find that road infrastructure has no effect to poverty reduction. 

Similar to community empowerment, this will directly improve the welfare of the community, where more empowered communities through quality improvement programs for education, training or counseling will have higher productivity resulting in increased wages to the community (Konings & Vanormelingen, 2015).

Using panel data regression, although there are 2 uses of a subset of samples that give results that are not in accordance with the hypothesis, we can see that the estimation results using a complete sample and most other subsets of samples show a consistent result, which is found that an increase in village funds per capita has an effect on the increase in consumption per capita. This shows that the Village Fund program is arguably successful in completing one of its objectives, namely improving the welfare of the village community. Although there are limitations in the method used because the Village Fund program is implemented simultaneously and there is no control group as a comparison. This research shows that at least the direction of implementing the Village Fund program is in accordance with its objectives.

CONCLUSION

This study shows two things: First, a description of the growth in consumption expenditure per capita of the rural population. This study shows that regions with high geographical difficulties and regions with high poverty rates have faster consumption growth. Second, the implementation of the Village Fund program contributes positively to the increase in average expenditure using the panel regression method at district level data. Meanwhile, the regression analysis showed that the Village Fund Program contributed to the increase in consumption, especially in areas with low geographical difficulties and low poverty rates.

Thus, this study shows that the portion of the Village Fund needs to be adjusted to the specific needs of the region. For example, the magnitude of the Village Fund formulation is prioritized in areas that have a high Geographical Difficulty Index (IKG) where infrastructure access is low and poverty levels are high, so they can catch up with infrastructure development and poverty reduction.

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### APPENDIX

**Appendix 1A.** Descriptive statistics of selected variables in 2014

| Variable                                                                 | Obs | Mean       | Std.Dev | Min     | Max     |
|-------------------------------------------------------------------------|-----|------------|---------|---------|---------|
| Per capita real consumption expend.                                     | 432 | 781607.70  | 210186.70 | 364868.00 | 1503502.00 |
| Poverty rate                                                            | 432 | 14.16      | 7.98    | 2.25    | 44.49   |
| Village funds per capita                                               | 432 | -          | -       | -       | -       |
| Average age of head of household                                       | 432 | 46.32      | 3.18    | 36.75   | 54.89   |
| The average age of the head of the house ladder squares                | 432 | 2155.48    | 294.92  | 1350.45 | 3013.31 |
| Dependency ratio                                                        | 432 | 47.41      | 6.33    | 29.17   | 67.54   |
| Average length of school                                               | 432 | 7.24       | 1.37    | 0.63    | 11.61   |
| Numeral hope alive                                                     | 432 | 67.96      | 3.62    | 53.60   | 77.45   |
| Human Development Index (IPM)                                          | 432 | 64.84      | 5.78    | 25.38   | 80.73   |
| Percentage of household head work in sector agriculture, plantation,   | 432 | 57.78      | 15.35   | 17.91   | 99.69   |
| forestry, hunting, and fishing                                         |     |            |         |         |         |
| percentage of household head work in the mining and quarrying sector   | 432 | 2.30       | 3.89    | 0.00    | 28.21   |
| percentage of household head work in the industrial sector             | 432 | 4.51       | 4.22    | 0.00    | 31.68   |
| percentage of household head work in sector electricity, gas, and      | 432 | 0.19       | 0.32    | 0.00    | 2.48    |
| water drinking                                                         |     |            |         |         |         |
| Percentage of household head work in the construction sector           | 432 | 6.57       | 4.58    | 0.00    | 35.92   |
| Percentage household head work in sector trade, restaurant and        | 432 | 7.87       | 4.19    | 0.00    | 26.22   |
| accommodation                                                          |     |            |         |         |         |
| Percentage of household head work in the transportation, warehousing   | 432 | 3.28       | 2.09    | 0.00    | 15.96   |
| and communication sector                                               |     |            |         |         |         |
| percentage household head work in sector institutions finance, real    | 432 | 0.20       | 0.35    | 0.00    | 2.34    |
| estate, business, rental, and services company                         |     |            |         |         |         |
| Percentage of household heads who work in the Service, Community,      | 432 | 9.70       | 4.60    | 0.31    | 36.08   |
| Social and Individual sectors                                          |     |            |         |         |         |
| Percentage of raskin recipients                                       | 432 | 55.02      | 22.07   | 0.00    | 97.39   |
| Percentage of PKH recipients                                           | 432 | 2.92       | 4.83    | 0.00    | 52.96   |
| Percentage of BSM recipients                                           | 432 | 11.40      | 6.83    | 0.00    | 46.12   |
### Appendix 1B. Descriptive statistics of selected variables in 2017

| Variable                                                                 | 2017 (after) |          |          |          |          |
|--------------------------------------------------------------------------|--------------|----------|----------|----------|----------|
| Obs | Mean | Std.Dev | Min | Max |
|-----------------|-------------|----------|------|------|----------|
| Per capita real consumption expenditures  | 432 | 892775.50 | 229778.90 | 404987.70 | 2128852.00 |
| Poverty rate  | 432 | 14.10 | 8.09 | 2.01 | 43.63 |
| Village funds per capita  | 432 | 202929.20 | 209524.20 | 25532.15 | 2850647.00 |
| Average age of head of household  | 432 | 47.29 | 3.17 | 36.40 | 56.37 |
| The average age of the head of the house ladder squares  | 432 | 2246.46 | 298.10 | 1324.83 | 3177.41 |
| Dependency ratio  | 432 | 41.54 | 5.55 | 27.08 | 61.67 |
| Average length of school  | 432 | 7.55 | 1.37 | 0.71 | 11.65 |
| Numeral hope alive  | 432 | 68.36 | 5.69 | 27.87 | 82.85 |
| Human Development Index (IPM)  | 432 | 56.51 | 15.70 | 7.58 | 99.64 |
| Percentage of household head work in sector agriculture, plantation, forestry, hunting, and fishing  | 432 | 2.18 | 3.97 | 0.00 | 42.00 |
| Percentage of household head work in the mining and quarrying sector  | 432 | 5.25 | 4.71 | 0.00 | 30.07 |
| Percentage of household head work in the industrial sector  | 432 | 0.51 | 0.76 | 0.00 | 6.76 |
| Percentage of household head work in sector electricity, gas, and water drinking  | 432 | 5.92 | 4.06 | 0.00 | 24.93 |
| Percentage of household head work in the construction sector  | 432 | 8.56 | 4.51 | 0.00 | 27.23 |
| Percentage of household head work in the transportation, warehousing and communication sector | 432 | 3.31 | 2.15 | 0.00 | 14.40 |
|-----------------------------------------------|-----|------|------|------|-------|
| Percentage household head work in sector institutions finance, real estate, business, rental, and services company | 432 | 0.64 | 0.96 | 0.00 | 9.67 |
| Percentage of household heads who work in the Service, Community, Social and Individual sectors | 432 | 8.73 | 4.75 | 0.36 | 40.43 |
| Percentage of raskin recipients | 432 | 43.08 | 21.53 | 0.00 | 96.39 |
| Percentage of PKH recipients | 432 | 7.79 | 6.52 | 0.00 | 59.00 |
| Percentage of BSM recipients | 432 | 12.78 | 7.71 | 0.00 | 61.16 |
| Percentage of BPI BPJS membership | 432 | 39.69 | 19.77 | 0.00 | 90.93 |
| Percentage of JAMKESDA Recipients | 432 | 20.19 | 28.83 | 0.00 | 100.00 |
| Percentage of KUR Recipients | 432 | 5.13 | 3.64 | 0.00 | 17.04 |
| Percentage of household with healthy drinking water | 432 | 55.42 | 20.86 | 0.00 | 98.35 |
| Percentage of household with electricity | 432 | 91.81 | 16.90 | 0.00 | 100.00 |
| Percentage of household with toilet | 432 | 68.24 | 16.49 | 0.93 | 97.27 |
| Percentage of household with decent closet | 432 | 64.99 | 19.15 | 0.00 | 100.00 |
| Percentage of household with septic-tank regency / city GRDP | 432 | 2448.43 | 306.01 | 1531.14 | 3317.73 |

**Appendix 1C.** Descriptive statistics of selected variables in 2018

| Variable | 2018 (after) |
|----------|--------------|
| Per capita real consumption expenditures | 974693.70 | 237844.30 | 530879.70 | 1880854.00 |
| Poverty rate | 13.39 | 7.96 | 1.98 | 43.49 |
| Village funds per capita | 853083.50 | 1047740.00 | 108054.20 | 14100000.00 |
| Average age of head of household | 47.57 | 3.09 | 37.55 | 55.98 |
| The average age of the head of the house ladder squares | 2448.43 | 306.01 | 1531.14 | 3317.73 |
| Dependency ratio | 50.77 | 6.50 | 34.31 | 76.36 |
| Average length of school | 7.66 | 1.38 | 0.85 | 11.66 |
| Numeral hope alive | 68.57 | 3.45 | 54.82 | 77.54 |
| Human Development Index (IPM) | 67.18 | 5.62 | 29.42 | 83.42 |
| Percentage of household head work in sector agriculture, plantation, forestry, hunting, and fishing | 54.99 | 14.70 | 7.90 | 98.83 |
| Percentage of household head work in the          | 432 | 2.14 | 4.12 | 0.00 | 36.36 |
|-----------------------------------------------|-----|------|------|------|-------|
| mining and quarrying sector                    |     |      |      |      |       |
| Percentage of household head work in the      | 432 | 5.17 | 4.82 | 0.00 | 35.99 |
| industrial sector                              |     |      |      |      |       |
| Percentage of household head work in sector    | 432 | 0.21 | 0.36 | 0.00 | 4.34  |
| electricity, gas, and water drinking           |     |      |      |      |       |
| Percentage of household head work in the       | 432 | 6.30 | 4.01 | 0.00 | 29.17 |
| construction sector                            |     |      |      |      |       |
| Percentage household head work in sector       | 432 | 8.76 | 4.48 | 0.00 | 25.07 |
| trade, restaurant and accommodation             |     |      |      |      |       |
| Percentage of household head work in           | 432 | 3.31 | 2.12 | 0.00 | 24.44 |
| the transportation, warehousing and            |     |      |      |      |       |
| communication sector                            |     |      |      |      |       |
| Percentage household head work in sector       | 432 | 0.54 | 0.60 | 0.00 | 4.49  |
| institutions finance, real estate, business,   |     |      |      |      |       |
| rental, and services company                    |     |      |      |      |       |
| Percentage of household heads who work in the  | 432 | 9.96 | 5.14 | 1.17 | 36.08 |
| Service, Community, Social and Individual      |     |      |      |      |       |
| sectors                                        |     |      |      |      |       |
| Percentage of Raskin recipients                | 432 | 46.57 | 20.98 | 0.00 | 95.46 |
| Percentage of PKH recipients                   | 432 | 11.09 | 8.33 | 0.00 | 60.85 |
| Percentage of BSM recipients                   | 432 | 14.68 | 7.50 | 0.00 | 45.12 |
| Percentage of BPI BPJS membership              | 432 | 0.45  | 0.20 | 0.00 | 0.94  |
| Percentage of JAMKESDA Recipients              | 432 | 19.17 | 29.20 | 0.00 | 99.81 |
| Percentage of KUR Recipients                   | 432 | 6.62  | 4.40 | 0.00 | 25.21 |
| percentage of household with healthy           | 432 | 39.01 | 19.00 | 0.00 | 85.45 |
| drinking water                                 |     |      |      |      |       |
| percentage of household with electricity       | 432 | 84.99 | 23.00 | 0.00 | 100.00|
| percentage of household with toilet            | 432 | 78.03 | 15.33 | 3.59 | 100.00|
| percentage of household with decent closet     | 432 | 68.19 | 18.73 | 0.39 | 98.31 |
| percentage of household with septic-tank       | 432 | 67.22 | 18.49 | 0.39 | 98.31 |
| regency / city GRDP                            | 432 | 1925.34 | 19278.70 | 106.00 | 197164.00|
## Appendix 2 A. Panel Estimation at District IKG Level

| Variable | District | District IKG Level | IKG>60 | 60<IKG>40 | IKG<40 |
|----------|----------|-------------------|--------|-----------|--------|
| Per capita real consumption exp. | dd_cap4th | | | | |
| b/se | **0.037** | **-0.124** | **0.051** | **-0.003** |
| | (0.016) | (0.059) | (0.027) | (0.020) |
| Average age of head of household | age | 81441.318*** | 65256.699 | -64776.585 | **-59746.535** |
| | | (35857.162) | (240116.214) | (61760.614) | (59227.990) |
| The avg age of the head of the house ladder sq | agesq | 544.816 | -904.441 | 352.501 | 369.318 |
| | | (380.985) | (2800.451) | (675.056) | (609.761) |
| dependency ratio | dep_ratio | 7002.731*** | 13819.807*** | 7323.018*** | **7587.104*** |
| | | (1000.186) | (4842.659) | (1489.079) | (1346.935) |
| Average length of school | mys | 5105.932 | 60203.581 | -20128.688 | -4277.604 |
| | | (9864.641) | (54992.500) | (16319.829) | (13323.176) |
| Life expectation rate | ahh | -5708.113* | 13319.369 | -42.063 | -15028.257*** |
| | | (2984.594) | (11536.023) | (4416.334) | (4031.961) |
| Human Development Index (IPM) | ipm | 15501.383*** | **-19978.965** | **14731.041*** | **33791.497*** |
| | | (3209.658) | (13593.804) | (5013.924) | (563.948) |
| % of household head work in agriculture sectors | sector1 | -5444.642*** | 13867.180 | -3319.432 | **-8071.445*** |
| | | | (1523.311) | (14336.757) | (2667.738) | (1800.967) |
| % of household head work in mining sectors | sector2 | 3611.685* | 16301.261 | 3722.268 | 3486.665 |
| | | | (2041.925) | (21637.532) | (3409.885) | (2389.885) |
| % of household head work in industrial sector | sector3 | -4581.407** | 24204.870 | -1020.641 | **-8263.255*** |
| | | | (1881.518) | (15610.399) | (3414.537) | (2195.832) |
| % of hh head work in electr, gas, water sector | sector4 | -11933.002* | 69763.249 | 583.518 | -16613.756** |
| | | | (6242.033) | (56635.525) | (12089.719) | (6720.711) |
| % of hh head work in construction sector | sector5 | -2253.699 | 19459.584 | 3752.373 | **-6638.510*** |
| | | | (2021.531) | (20793.505) | (3827.374) | (2278.293) |
| % of hh head work in trade, restaurant accomod. sector | sector6 | -1655.460 | 12350.905 | 3175.839 | **-4342.939** |
| | | | (1962.926) | (21555.945) | (3857.526) | (2141.402) |
| % of hh head work in transp, comm.& wirehouse sector | sector7 | 3451.297 | 6691.504 | 2824.410 | **-878.985** |
| | | | (2431.467) | (20614.017) | (4092.263) | (2931.882) |
|                       | % of hh head work | % of Raskin recipients | % of PKH recipients | % of BSM recipients | % of Jamkesda recipients | % of BPI BPJS recipients | % of KUR recipients | % of hh with healthy drinking | Regency/city GRDP | Dummy year 2017 | Dummy year 2018 | Intercept |
|-----------------------|-------------------|------------------------|---------------------|---------------------|--------------------------|-------------------------|---------------------|-------------------------------|------------|-------------|---------------|----------|
| in finance, real estate sector | 5946.367 (4988.860) | (251.970) | -3450.910*** (703.575) | 757.695 (583.849) | 530.005*** (149.300) | -1043.206*** (246.402) | 1893.400 (1258.325) | -160.146 (209.597) | 0.474 (0.836) | 105524.114*** (13678.468) | 54961.019*** (18891.718) | 277563.406*** (857849.247) |
| sector 8              | 81009.190 (60442.686) | 1003.171 (312.280) | 1063.008 (625.763) | 1207.346 (726.571) | 1139.085 (1063.589) | -1903.029 (321.784) | 12867.981 (1468.399) | 2743.108** (1324.580) | 1345.423 (317.743) | 319578.641*** (111471.359) | 285167.598** (29044.292) | -299651.580 (4978506.986) |
| % of hh head work in service, social sector | 2119.173 (9763.832) | 315.724 (312.280) | 985.935 (762.571) | 4957.009** (1005.934) | 688.035*** (328.045) | -925.437*** (419.608) | 12127.932 (419.608) | 389.482 (317.743) | 3.103*** (0.339) | 123276.662*** (22312.102) | 69264.479** (29044.292) | 3.103*** (0.339) |
| sector 9              | 3291.024 (5236.777) | 304.450 (312.280) | 1295.724 (312.280) | -3670.353** (186.883) | 127.83 (1005.934) | -1611.750*** (419.608) | 1127.932 (419.608) | 457.551* (317.743) | 0.313 (0.339) | 378182.766*** (18195.173) | 29392.942 (26634.583) | 0.313 (0.339) |

| % of KUR recipients | 866.910 (586.910) | 302.515 (562.515) | 545.724 (562.515) | 334.910 (562.515) | 254.950 (562.515) | 545.724 (562.515) | 334.910 (562.515) | 254.950 (562.515) | 302.515 (562.515) | 545.724 (562.515) | 545.724 (562.515) | 545.724 (562.515) |
| Dummy year 2018 | 5946.367 (4988.860) | (251.970) | -3450.910*** (703.575) | 757.695 (583.849) | 530.005*** (149.300) | -1043.206*** (246.402) | 1893.400 (1258.325) | -160.146 (209.597) | 0.474 (0.836) | 105524.114*** (13678.468) | 54961.019*** (18891.718) | 277563.406*** (857849.247) |
| Dummy year 2017 | 81009.190 (60442.686) | 1003.171 (312.280) | 1063.008 (625.763) | 1207.346 (726.571) | 1139.085 (1063.589) | -1903.029 (321.784) | 12867.981 (1468.399) | 2743.108** (1324.580) | 1345.423 (317.743) | 319578.641*** (111471.359) | 285167.598** (29044.292) | -299651.580 (4978506.986) |
| Intercept | 3291.024 (5236.777) | 304.450 (312.280) | 378182.766*** (18195.173) | 29392.942 (26634.583) | 3.103*** (0.339) | 0.313 (0.339) | 0.596 (0.596) | 0.712 (0.595) | 0.712 (0.595) | 0.596 (0.596) | 0.712 (0.595) | 0.712 (0.595) |
| N | 1296 | 11 | 654 | 591 | 1296 | 11 | 654 | 591 | 1296 | 11 | 654 | 591 | 1296 | 11 | 654 | 591 | 1296 | 11 | 654 | 591 |
### Appendix 2 B. Panel Estimation at District Poverty Level

|                          | District Poverty Level |                   |                   |                   |
|--------------------------|------------------------|-------------------|-------------------|-------------------|
|                          | P < 10%                | 10% < P < 14%     | P > 14%           |                   |
| Per capita real consumption exp. | **0.037** | **0.015** | **0.035** | **0.012** |
| dd_cap4th                | (0.016)                | (0.022)            | (0.023)            | (0.027)            |
| Average age of household age | -81441.318** | -22246.895*** | -60070.128        | -27112.778         |
|                          | (35857.162)            | (76704.689)       | (42181.513)       | (53681.063)       |
| The average age of the head of the house ladder squares | 544.816       | 1081.619**       | 336.076           | 6.614             |
|                          | (380.985)              | (806.205)         | (450.507)         | (579.901)         |
| dependency ratio dep_ratio | 7002.733*** | 9528.352*** | 5871.431*** | 6331.973*** |
|                          | (1000.186)             | (1617.296)        | (1303.486)        | (1655.230)        |
| Average length of school mys | 5105.932        | 8990.050         | 4646.631          | 14328.538         |
|                          | (9864.641)             | (16827.904)       | (12349.997)       | (15167.613)       |
| Life expectation rate ahh | -5708.113*       | -391.493         | -7918.600**       | -5485.562         |
|                          | (2984.594)             | (5456.472)        | (3575.612)        | (4583.878)        |
| Human Development Index (IPM) ipm | 15501.383*** | 17810.220*** | 11860.389*** | 6478.309         |
| % of household head work in agriculture sectors sector1 | -5444.642*** | -9138.240*** | -3052.143         | -1499.449         |
|                          | (1523.31)              | (2196.421)        | (2081.856)        | (2719.535)        |
| % of household head work in mining sectors sector2 | 3611.685*        | -1814.037        | 6605.137*         | 9789.369**        |
|                          | (2041.925)             | (2657.128)        | (3734.469)        | (4953.658)        |
| % of household head work in industrial sector sector3 | -4581.407**      | -11519.486***    | 522.640           | 2806.297          |
|                          | (1881.518)             | (2633.890)        | (2592.710)        | (3338.302)        |
| % of hh head work in electr, gas, water sector sector4 | -11933.002*       | -11926.981       | -12006.313        | -859.869          |
|                          | (6242.033)             | (7537.670)        | (10236.919)       | (13365.493)       |
| % of hh head work in construction sector sector5 | -2253.699        | -7024.777**      | 574.494           | 5022.159          |
|                          | (2021.531)             | (2927.049)        | (2767.909)        | (3769.265)        |
| % of hh head work in trade, restaurant accomod. Sector sector6 | -1655.460       | -5083.952*       | -776.141          | 1850.107          |
|                          | (1962.926)             | (2670.963)        | (2795.508)        | (3822.891)        |
| % of hh head work in transp, comm.& wirehouse sector sector7 | 3451.297        | -578.353         | 4070.568          | 4902.446          |
|                          | (2431.467)             | (3392.321)        | (3443.865)        | (4468.466)        |
| % of hh head work in finance, real estate sector sector8 | 5946.367        | 19944.132**      | -2163.973         | -687.158          |
|                          | (4988.860)             | (8171.609)        | (6360.114)        | (8878.547)        |
% of hh head in service, social sector | 3952.359** | -662.091 | 7753.290*** | 11180.739***
--- | --- | --- | --- | ---
% of Raskin recipients | -870.739*** | -759.886* | -583.930** | -485.401
% of PKH recipients | -3460.910*** | -2398.223 | -2928.753*** | -2854.074***
% of BSM recipients | 757.665 | 1258.495 | 696.723 | 598.110
% of Jamkesda recipients | 530.005*** | 333.319 | 670.800*** | 1200.157***
% of BPI BPJS recipients | -1013.206*** | -572.140 | -814.056*** | -762.993*
% of KUR recipients | 1893.400 | 1173.316 | 2865.675* | 4427.660*
% of hh with healthy drinking water | -160.146 | -180.090 | -104.451 | 9.914
% of hh with electricity | -1094.651*** | -1663.753** | -741.149 | -761.890
% of hh with toilets | 1462.111*** | 1064.700 | 1725.085*** | 1209.960**
% of hh with healthy closet | 966.231** | 1686.801** | 502.990 | 263.312
% of hh with septic tank | -347.054 | -953.228** | -59.274 | 34.411
Regency/city GRDP | 0.474 | 0.222 | 1.616*** | 2.098*
Dummy year 2017 | 105524.114*** | 91324.805*** | 118749.305*** | 138288.945***
Dummy year 2018 | 54961.019*** | 59137.828* | 69918.867*** | 82402.463**
Intercept | 2775613.409*** | 6007427.522*** | 2340485.983** | 1421733.210
r2_o | 0.596 | 0.632 | 0.542 | 0.555
N | 1296 | 405 | 831 | 543

* p < 0.1
** p < 0.05
*** p < 0.01
### Appendix 2 C. Panel Estimation at District Areas

|                          | District | Sumatera’s | Java | Kalimantan’s and Eastern Indonesia |
|--------------------------|----------|------------|------|------------------------------------|
|                          | b/se     | b/se       | b/se | b/se                               |
| Per capita real          | 0.037**  | 0.039      | 0.021| 0.054*                             |
| consumption exp.         | (0.016)  | (0.049)    | (0.019)| (0.029)                           |
| Average age of head      | -81441.38** | -126708.524 | -40158.488 | -64909.770                      |
| of household             | (35857.162) | (86996.895) | (84744.899) | (66539.506)                     |
| The average age of the   | 544.816  | 1175.990   | 213.442| 64909.770                        |
| head of the house        | (380.985) | (919.801)  | (843.076) | (726.129)                        |
| ladder squares           |          |            |      |                                    |
| dependency ratio         | 7002.731*** | 5397.599*** | 6077.796*** | 8288.294***                     |
| dep_ratio                | (1000.186) | (1692.517) | (1929.138) | (1594.539)                      |
| Average length of school | 5105.932  | -57872.129*** | -23576.026 | 11051.939                      |
| mys                      | (9864.641) | (17384.010) | (19517.058) | (16275.109)                     |
| Life expectation rate    | -5708.113* | -16245.953*** | -21546.009*** | 4802.207                        |
| ahh                      | (2984.594) | (5465.541)  | (4403.191) | (4768.435)                      |
| Human Development Index  | 15501.383*** | 46201.945*** | 27867.211*** | 9745.550*                       |
| (IPM)                    | (3209.658) | (6148.933)  | (6167.930) | (5204.660)                      |
| % of household head      |          |            |      |                                    |
| work in agriculture      | 5444.642*** | 5629.627**  | 5835.286**  | 6353.410**                       |
| sectors                  | (1523.311) | (2401.286)  | (2650.635) | (2703.174)                       |
| % of household head      | 3611.685* | 5000.984*   | 12531.856** | 763.285                          |
| work in mining           | (2041.925) | (2990.726)  | (6275.587) | (3406.378)                       |
| sectors                  |          |            |      |                                    |
| % of household head      | -4581.407** | -6559.396** | -4634.040** | -3047.268                        |
| work in industrial       | (1881.518) | (3270.102)  | (3048.265) | (3389.670)                       |
| sector                   |          |            |      |                                    |
| % of hh head work in     | -11933.002* | -9492.444   | -19185.643* | -2720.809                        |
| electr, gas, water       | (6242.033) | (7768.812)  | (10154.234) | (13147.070)                      |
| sector                   |          |            |      |                                    |
| % of hh head work in     | -2253.699 | -4259.051  | -4670.519  | -1355.229                        |
| construction sector      | (2021.531) | (3481.662)  | (3087.805) | (3492.874)                       |
| % of hh head work in     | -1655.460 | -257.146   | -1246.226  | -4838.639                        |
| trade, restaurant        | (1962.926) | (2947.652)  | (3049.804) | (3604.335)                       |
| accomod. sector          |          |            |      |                                    |
| % of hh head work in     | 3451.297  | -91.626    | 1817.771  | 4593.373                         |
| transp, comm.&           | (2431.467) | (4096.907)  | (3949.662) | (4195.717)                       |
| wirehouse sector         |          |            |      |                                    |
| % of hh head work in | sector8 | 5946.367 | 17043.490* | 3483.716 | 417.720 |
|----------------------|---------|----------|-------------|----------|---------|
|                      |         | (4988.860) | (8741.915) | (6789.554) | (8663.253) |
| % of hh head work in | sector9 | 3952.359** | -3760.695 | 2806.299 | 5483.137* |
|                      |         | (i820.388) | (3061.113) | (3400.188) | (3105.804) |
| % of Raskin recipients | raskin | -870.739*** | -393.794 | 841.850** | -1141.430*** |
|                      |         | (215.970) | (376.165) | (395.311) | (355.354) |
| % of PKH recipients | pkh | -3460.910*** | -793.210 | -3312.904** | -4806.509*** |
|                      |         | (703.575) | (1228.405) | (1399.799) | (1117.139) |
| % of BSM recipients | bsm | 757.665 | 100.232 | 1166.815 | 850.028 |
|                      |         | (583.840) | (891.932) | (1458.313) | (911.929) |
| % of Jamkesda recipients | jamkesda | 530.005*** | 198.967 | 73.611 | 667.765*** |
|                      |         | (149.230) | (221.524) | (255.950) | (254.627) |
| % of BPI BPJS recipients | bpjs | -1013.206*** | -805.807** | -1096.593* | -905.534** |
|                      |         | (246.402) | (380.816) | (630.043) | (389.988) |
| % of KUR recipients | kur | 1893.400 | 546.016** | 1813.685 | 2218.821 |
|                      |         | (1258.325) | (2103.305) | (2084.473) | (2014.742) |
| % of hh with healthy drinking water | waterr | -160.146 | 145.721 | -258.316 | -62.869 |
|                      |         | (209.597) | (311.324) | (383.346) | (353.703) |
| % of hh with electricity | electricity | -1094.651*** | -1865.922** | -6966.316 | -981.484* |
|                      |         | (382.415) | (874.160) | (1049.876) | (550.366) |
| % of hh with toilets | toilet | 1462.111*** | 2297.957*** | 2175.013** | 561.328 |
|                      |         | (408.192) | (734.549) | (933.369) | (621.139) |
| % of hh with healthy closet | closet | 966.231** | -498.654 | 2569.460** | 1642.576** |
|                      |         | (487.679) | (797.459) | (1049.914) | (768.812) |
| % of hh with septic tank | septic_tank | -347.054 | 124.371 | -670.626 | -849.313* |
|                      |         | (276.867) | (381.566) | (572.986) | (461.118) |
| Regency/city GRDP | GRDPb | 0.474 | 0.162 | 0.884** | 2.618*** |
|                      |         | (0.386) | (0.861) | (0.362) | (0.985) |
| Dummy year 2017 | 2017.year | 105524.114*** | 9577.115 | 9818.488** | 138705.843*** |
|                      |         | (13678.468) | (25290.438) | (25511.597) | (23495.147) |
| Dummy year 2018 | 2018.year | 54961.019*** | 25380.945 | 54934.583 | 83416.397** |
|                      |         | (18901.718) | (30209.945) | (37659.354) | (32799.156) |
| Intercept | _cons | 2775613.409*** | 2904146.731 | 2451739.306 | 2167003.361 |
|                      |         | (857849.247) | (2144361.713) | (2355431.664) | (1477429.503) |
| r2_o |         | 0.596 | 0.660 | 0.785 | 0.630 |
| N |         | 1296 | 381 | 255 | 609 |