

Detecting the corruption pattern and measuring the corruption detection pace at the Indonesian village level

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ABSTRACT

Despite widespread reports of corruption in 74,961 village authorities in Indonesia, the government has yet to establish an effective mechanism to detect and prevent corruption at the village government level. Therefore, this study provides an overview of corruption in villages by perpetrator profile, village development, and corruption detection pace to identify the highest-risk authorities exposed to corruption and implement preventive measures. Supported by a qualitative descriptive strategy for interpreting the data, this study analyzed 186 villages whose governing bodies engaged in corruption and were prosecuted by law enforcement officials from 2015 to 2021. The result shows that Java is more focused than other regions on prosecuting corruption cases in rural areas. Moreover, corruption cases in Java and Sumatra regions concentrate on developing villages. Outside of these two regions, most corruption occurs in disadvantaged villages. Village corruption cases were detected on average 2.72 years after the onset of corruption. These findings address a gap in previous research by exploring the variation in losses resulting from village corruption cases across different regions. The study underscores the significance of implementing regulations that mandate regular audits and other detection policies customized to specific attributes, such as region, development level, perpetrator profiles, and fraudulent scheme trends.

KEYWORDS:

Audit; corruption; detection; development; village

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INTRODUCTION

Corruption is a type of fraud that significantly threatens the global public sector's development. As a developing country, Indonesia's Corruption Perception Index tends to stagnate between 2015 and 2021. According to Transparency International (2021), Indonesia has a Corruption Perception Index score of 38 and is ranked fifth among ASEAN countries. Moreover, Indonesia has a lower score than Singapore (85), Malaysia (48), Timor-Leste (41), and Vietnam (39). Furthermore, Indonesia's score decreased to 37 points in 2020, a decrease of 3 points compared to 2019, which was Indonesia's highest achievement with a score of 40 (2018 = 38, 2017 = 37, and 2016 = 37). Previous researchers analyzed this condition as (1) the inability of the state to simplify public services (Suyatmiko, 2021), (2) the occurrence of systemic/multisectoral corruption (Suyatmiko, 2021; Transparency International, 2020), (3) the absence of corruption prevention and detection policies (Transparency International, 2020), and (4) low public and expert perceptions regarding the implementation of corruption eradication policies (Susilo et al., 2019; Transparency International, 2020).

Any act of corruption will harm the state and society at any level of government/public sector. According to the Association of Certified Fraud Examiners (ACFE, 2022), out of 2,110 cases in 133 countries, all types of fraud, including corruption, caused a total loss of over USD 3.6 billion or IDR 55,839.6 trillion. In addition, according to the report, 23 of the 194 cases with a median loss value of USD 121,000 or IDR 1.8 billion in the Asia-Pacific region originated in Indonesia (11.86%). If the social costs of crime are considered rather than just calculated from the assets/money that are stolen, the impact of the losses will be significantly greater. The social costs of crime resulting from corruption include a) anticipatory costs against corruption (e.g., socialization and acquisition of information technology for detection purposes); b) costs due to corruption (e.g., total asset damage, absence of leadership, and environmental impacts); and c) costs of reaction to corruption (e.g., costs of investigation, deprivation, trial, and detention) (Brand & Price, 2000). Brand and Price (2000) were the first to make a comprehensive attempt to estimate the cost of crime in England and Wales, according to the Home Office of the United Kingdom (Heeks et al., 2018). The social costs of this crime will be higher if intangible costs, such as community distrust and low community participation in development, are considered (Chalfin, 2015; Cohen, 2020; Perry, 2021).

Corruption hinders the economic development of a country or region, but it depends on the parameters under consideration and the subject of study. This condition makes less developed countries/regions more susceptible to corruption than developed ones (Fiorino et al., 2012; Rose-Ackerman & Palifka, 2016; Yang et al., 2017). In contrast to the previous research, Prabowo and Cooper (2016), Prabowo et al. (2017), and Šumah (2018) asserted that corruption can occur in any country or region, regardless of its level of development. Šumah (2018) highlighted previous studies from various nations that distinguish corruption from its negative effects (e.g., development), distinct from identifying the cause and the consequences. Mean-

while, Prabowo et al. (2017) also Prabowo and Cooper (2016) focused on the corruption in Indonesia. Due to the impact of corruption losses on the development of countries and regions, we must measure and describe the patterns of impact, perpetrators, and corruption schemes (Yunan et al., 2023) and then adjust the type of policy intervention accordingly (Mugellini et al., 2021; Yunan et al., 2023).

Law enforcement is currently targeting corruption in village financial management more than in the central/local government financial sector, transportation sector, or education sector, with a total of 619 cases from 2016–2021 (Indonesia Corruption Watch, 2017, 2018a, 2018b, 2020, 2021, 2022). Any repressive enforcement by law enforcement officials results from preventive and detective efforts and the implementation of follow-up measures (Sutarsa, 2014). Meanwhile, the village lacks a policy or mechanism to detect corruption. Since the enactment of the Village Law, the Audit Board of Republic of Indonesia (Badan Pemeriksa Keuangan, BPK) has not formulated a policy for auditing the financial statements of villages on a periodic/annual basis (BPK RI Official, 2021). Without a standard and comprehensive detection policy (e.g., a related whistleblower policy), those who know about corruption cases will be reluctant to report it, making it difficult to disclose (Mechtenberg et al., 2020). For example, when village corruption cases in Cirebon were reported, the whistleblower became a suspect for three months and was only cleared after the Coordinating Ministry of Political and Security Affairs exercised its discretion (BBC News Indonesia, 2022). According to Ifititah Sari in BBC News Indonesia (2022), the whistleblower protection policy has not been comprehensive, and even the Criminal Procedure Code (Kitab Undang-Undang Hukum Acara Pidana, KUHAP) does not regulate this protection. Therefore, research and studies on corruption in villages are required as material to evaluate existing prevention and detection policies.

In Indonesia, there are corruption prevention and eradication policies, but they cannot reach villages, the smallest unit of government. The National Strategy for Corruption Prevention (NSCP) established by Presidential Decree Number 54 in 2018 is limited to regulating prevention aspects, excludes repressive aspects of detection and enforcement, and has no outcomes in its policy design (Prihatmanto et al., 2022). This condition affects the propensity of law enforcement officials (police and prosecutors) to prosecute corruption cases in rural areas versus other sectors. Without a standard policy of corruption detection and a repressive approach, every law enforcement institution prioritizes achieving its organizational performance goals, such as case resolution and corruption case investigation. Increasing village supervision capacity is indeed regulated in the NSCP. However, there are several obstacles, including the absence of supervision through the Village Financial Supervision System (Sistem Pengawasan Keuangan Desa, Siswaskeudes) application, despite its testing in 20 districts/cities, and the absence of standard guidelines for Internal Government Supervisory Officers in conducting audits and supervision (Sekretariat Nasional Pencegahan Korupsi, 2021). Due to the lack of support for standard audit methods and an electronic-based supervision system, 74,961 villages in Indonesia are still susceptible to corruption despite their limitations. In addition, the ten-

gency of law enforcement to investigate corruption cases in the lower sector as opposed to the elite/central level will impact public mistrust and prove the existence of the idiom "law enforcement sharp downwards but blunt upwards."

To detect corruption cases, the police and prosecutors, as the spearhead law enforcement in villages, need support from the community, the regional inspectorate, and BPK. Previous research has demonstrated the importance of public complaints and whistleblowing systems for detecting corruption (Mamahit, 2018; Pramudyastuti et al., 2021; Seza et al., 2020). Detecting corruption through audits will also increase public trust (Cordery & Hay, 2019; Leung et al., 2015; Saleh & Ratmono, 2017). The contribution of BPK to the detection of corruption in rural areas has not been extensively studied in the past. However, the existence of the BPK as the Supreme Audit Board is important to ensure the quality of implementing this corruption detection policy. Therefore, it is important that BPK's policies, such as the Fraud Control Plan (FCP), audit methods, how to calculate state financial losses, and the use of information technology (e.g., e-audit), be disseminated to villages and regional supervisory officials. An independent Supreme Audit Board is deemed capable of resources (human and other supporting infrastructure) and enforcing transparency while influencing the formulation or ex-ante of government policies (Cordery & Hay, 2019; Ferry & Ahrens, 2021; Leung et al., 2015), as well as formulating audit policies in regional government units (Ferry & Ahrens, 2021).

Implementing the corruption detection strategy as one of the FCP strategies, in addition to preventive and repressive strategies, will take considerable time because it involves all aspects of the nation (BPKP, 2007). Consequently, the community, the executive, the legislature, also internal and external auditors must comprehend and implement this detection strategy. According to BPKP (2007), detection policies can include whistleblower systems, mandatory reporting of certain financial transactions, reporting of personal wealth of holders of public offices and functions, participation in anti-corruption and anti-money laundering movements, use of national single identification numbers, and increasing the capacity of internal supervisors to detect corruption. Meanwhile, understanding corruption theory, observing the danger signs and corruption schemes (awareness), and employing methodologies designed to find corruption are more straightforward, systematic steps for detecting corruption (Suprajadi, 2009). Profiling of corruption actors is a component of the detection process because it provides policymakers (management or auditors) with red flags for evaluating critical points in their financial statement transactions. Profiling of red flags includes an introduction to the risks of positions and actors in the organization, gender, age, parties involved, number of parties involved, and schemes, as well as the application of model detection in pre-audit to detect corruption (Prita et al., 2020; Sinarto, 2018; Hakami et al., 2020).

According to the ACFE (2022) report, the timing of corruption will affect the number of losses. For a 6-month corruption period, the median value of the losses incurred is USD 47,000, whereas for a 7-to-12-month corruption period, the median value is USD 100,000. Moreover, for a period greater than five years, the median value is USD 800,000. In contrast

to the increase in losses following the corruption period, the highest number of corruption cases detected involved corruption periods of less than six months (33%). Meanwhile, cases with a corruption period of 3–4 years have the lowest frequency (4%). This condition raises issues regarding formulating a policy to detect corruption cases quickly before causing a significant loss. This type of research (which describes the impact and profiling of actors) is important for measuring the implementation of corruption prevention and eradication policies.

Corruption perpetrators are typically solitary, but collaborating with others will result in greater losses. According to the mid-value report classified by ACFE (2022), 42% of cases involving a single perpetrator result in a loss of USD 57,000, 20% of cases involving two perpetrators result in a loss of USD 145,000, and cases involving three or more perpetrators result in a loss of USD 219,000. Taqi et al. (2021) and Zakariya (2020) stated that village heads dominate corruption actors in villages; thus, holders of this position must be a priority/target of corruption prevention and detection policies. In this village, it would be worthwhile to investigate the role of the village head as a perpetrator of corruption, especially in terms of whether he or she acts alone or with others and how severe the losses are.

With the context described earlier, there is a paucity of literature describing the development patterns of villages affected by corruption and the rate at which law enforcement detects corruption cases in villages. Meanwhile, the success rate of audit or prevention policies will be difficult to determine without a measure of the rate of corruption detection in villages. Prior research highlighted the importance of audits in detecting corruption (Olken, 2007; Prabowo et al., 2017; Taqi et al., 2021). For instance, Olken (2007) was the first to explore the effect of auditing on implementing local government programs in Indonesia. Mugellini et al. (2021) and Yunan et al. (2023) determined the development level of countries/regions affected by corruption cases and even intervention patterns. However, the same approach is not applicable at the local government level. In addition, even though Taqi et al. (2021) and Zakariya (2020) have identified some corruption case schemes, the approach utilized has not identified the perpetrator's profile, the target of corruption, and the extent of the damage caused.

With this study, the development patterns of villages affected by corruption and the perpetrators' profiles can be described, as well as research gaps and the pace of corruption detection in villages. This study's issues are related to the following questions: (1) What is the level of development in villages affected by corruption? (2) What is the profile of village-level corruption perpetrators? Moreover, (3) How long do law enforcement officials detect corruption cases? By addressing those problems, this study is important for planning and prioritizing the intervention of anti-corruption policies in the village with the highest exposure to corruption risk. In light of Indonesia's large number of villages, a state auditor or other investigative agency could manage its resources more efficiently.

RESEARCH METHOD

This study employs a descriptive (qualitative) methodology. This method is suitable for exploring additional areas of the topic that have received less attention in prior research and for providing a more in-depth examination of the area that is difficult to control for the experiment (Nassaji, 2015). The secondary data is collected from Indonesian online media using the text mining method and classified manually or automatically using analytical software (Antons et al., 2020; Nirmala & Pushpa, 2012). This study categorizes corruption data in 186 villages reported in various online media during the period 2015–2021, according to search results on google.com for the keywords "corruption" and "village." The authors validates and verifies the data by conducting additional research on reputable media pages, such as detik.com, kompas.com, antaranews.com, and tribunnews.com. This study is also conducted to find information not obtained from a single page, such as information on the case scheme, the case's duration, and the addition of the investigated perpetrator. The results of previous studies are then incorporated after data analysis and visualization using Tableau software/tools and MS Excel. Graph visualization lets analysts recognize trends, locations, and patterns and identify the optimal relationship between variables (Murphy, 2013). By integrating the findings and perspectives of numerous empirical findings, the review literature can provide better results to research questions than a single study (Snyder, 2019).

After classifying the data on villages affected by corruption cases, the authors compared it with the level of village development as measured by the Village Development Index (Indeks Desa Membangun, IDM) secondary data of the Ministry of Villages and Development of Disadvantaged Regions and Transmigration. The present study uses IDM as a metric for measuring village development because it has data on 74,961 villages in Indonesia and is updated annually (Kementerian Desa Pembangunan Daerah Tertinggal dan Transmigrasi, 2017). This composite index measures the development of village independence based on three parameters: the social resilience index (social resilience index, IKS), the economic resilience index (Indeks Ketahanan Ekonomi, IKE), and the ecological/environmental resilience index (Indeks Ketahanan Ekologi, IKL). It measures the development of village autonomy (Kementerian Desa Pembangunan Daerah Tertinggal dan Transmigrasi, 2017). Moreover, the classification of village development is determined by the following intervals: (1) Very Disadvantaged Villages: $IDM \leq 0.4907$; (2) Disadvantaged Villages: $0.4907 < IDM \leq 0.5989$; (3) Developing Villages: $0.5989 < IDM \leq 0.7072$; (4) Advanced Village: $0.7072 < IDM \leq 0.8155$; and (5) Independent Village: $IDM > 0.8155$. This classification aims to determine the nature and scope of government program interventions intended to improve village development. This index has been used to assess the impact of village fund transfer policies (Dewi & Arif, 2021), the quality of village facilities and infrastructure (Prasetya et al., 2020), village potential resources (Sukarno, 2020), and the formulation of environmental-based transfer policies (Mecca et al., 2021).

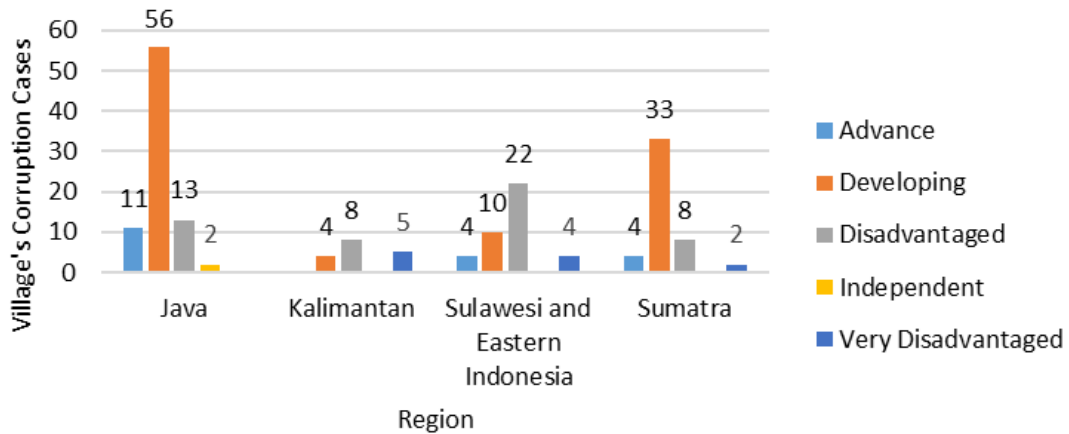


Figure 1. Distribution of the Number of Villages Affected by Corruption Cases in Indonesia, 2015–2021

RESULT AND DISCUSSION

Villages Development Affected by Corruption Cases

Research results show that of 186 villages, 56 villages (30.11%) with a developing status on Java were the most affected by corruption cases. After Java, Sumatra is in second place, with the number of developing villages at 33 or 17.74%. Different conditions occur in the Sulawesi and Kalimantan regions, where types of underdeveloped villages are affected by corruption cases. Figure 1 depicts the distribution of the number of villages affected by corruption cases in Indonesia from 2015 to 2021.

There is a tendency for villages with a higher level of development to have a greater value of losses. The distribution of loss value in villages with developing status on the island of Java ranges from IDR 0 to IDR 500 million; advanced villages, between IDR 0 and IDR 650 million; and independent villages, between IDR 800 million and IDR 2 billion. The distribution of loss value per case for villages with a disadvantaged status ranges between IDR 0 and IDR 1 billion. According to Figure 2, the village with the highest loss from corruption cases, total-

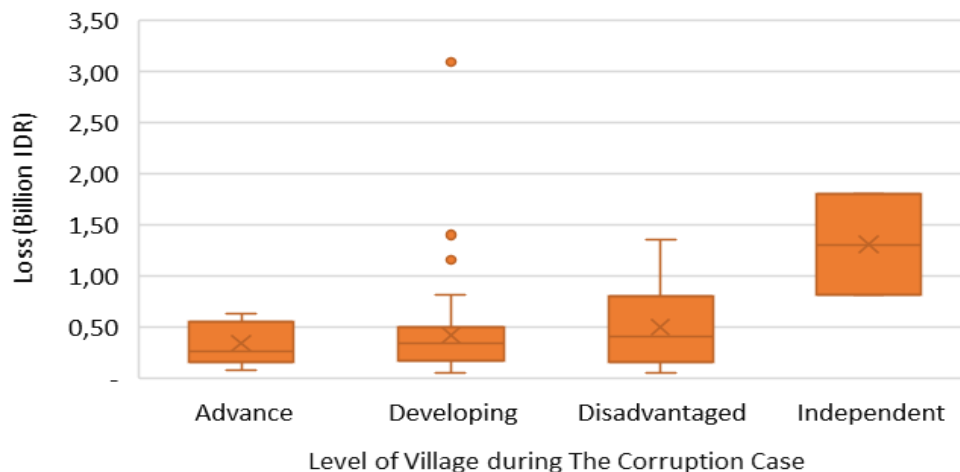


Figure 2. Distribution of Loss per Village Corruption Case in the Java Region

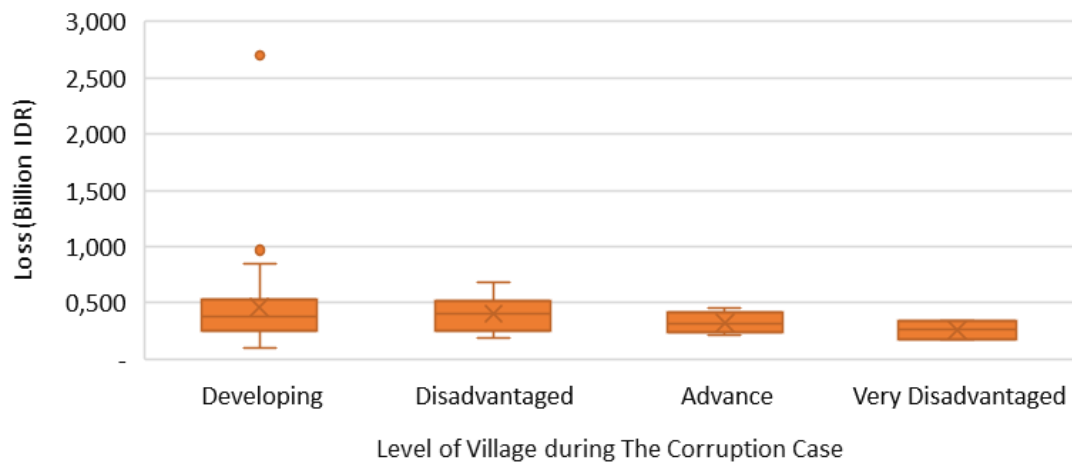


Figure 3. Distribution of Loss per Village Corruption Case in the Sumatra Region

ing IDR 3.1 billion, is outside the distribution of developing villages. The distribution of village losses in Sumatra is more significant than in other regions, ranging between IDR 0 and IDR 800 million. Similar to the pattern on the island of Java, the village in Sumatra with the highest loss (IDR 2.7 billion) falls outside the distribution of other developing villages' losses, as depicted in Figure 3.

In Kalimantan, Sulawesi, and Eastern Indonesia, disadvantaged and very disadvantaged villages dominate the distribution of village losses per case. As seen in Figure 4, the village with the greatest loss in the region (IDR 1.7 billion) is not included in the distribution of other disadvantaged villages. On the islands of Java and Sumatra, corruption cases tend to target villages that have escaped their disadvantaged status. Sumatra's pattern is comparable to Kalimantan, Sulawesi, and Eastern Indonesia, where the loss in disadvantaged villages is greater. The Villages Case in the Region of Java and Sumatra corruption pattern is pertinent to the research of Prabowo et al. (2017) also Prabowo and Cooper (2016). Those patterns contrast with those observed in Kalimantan, Sulawesi, and Eastern Indonesia, which are consistent

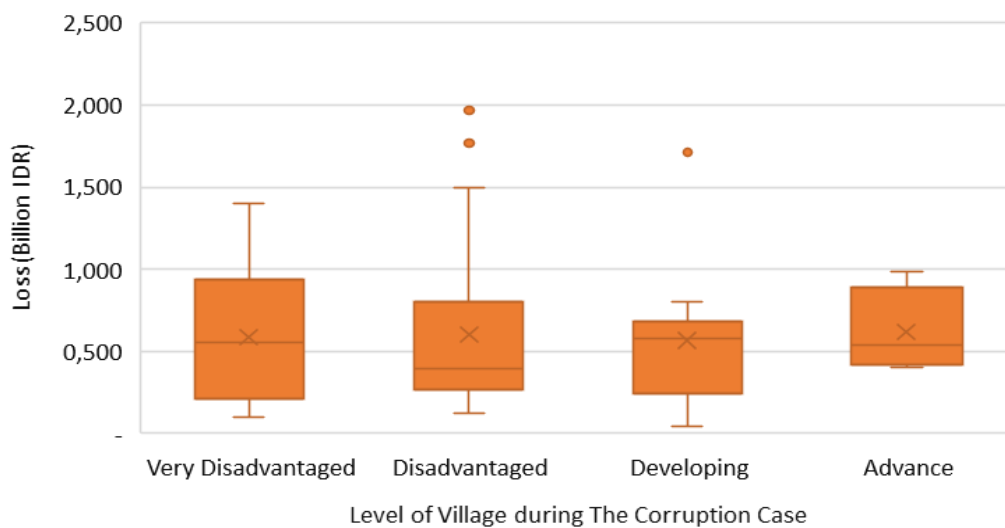


Figure 4. Distribution of Loss per Village Corruption Case in Kalimantan, Sulawesi, and Eastern Indonesia Region

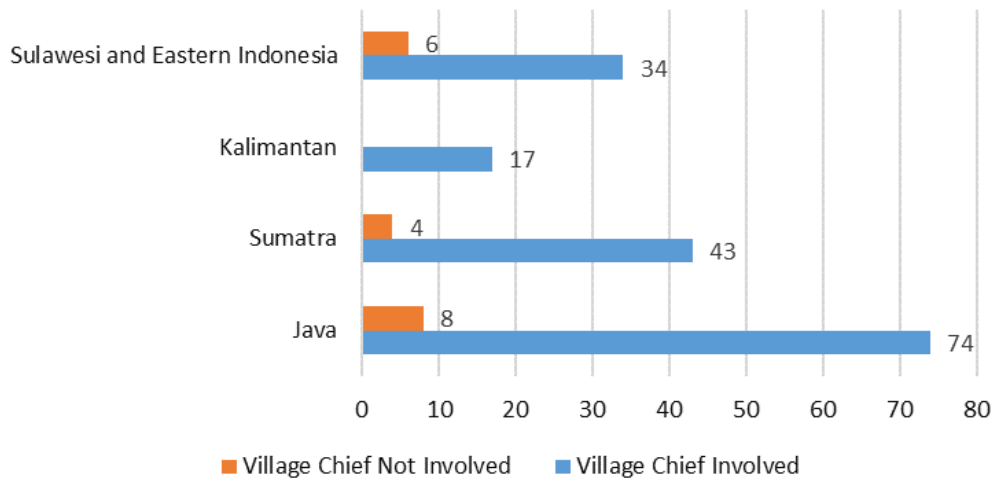


Figure 5. Number of Corruption Cases by Involvement of Village Heads per Region

with studies conducted by Fiorino et al. (2012), Rose-Ackerman and Palifka (2016), also Yang et al. (2017).

Although patterns of corruption in villages can be identified, the determination of policy targets, such as the research of Mugellini et al. (2021) and Yunan et al. (2023), necessitates additional research into factors such as human development and infrastructure support. The disparity in village corruption tendencies between Java and outside of Java shows the same pattern as the disparity in the human development index between the two regions. In the case of Java, villages with infrastructure and a higher human development index do not guarantee the absence of corruption. Corruption perpetrators in these developing villages could infiltrate and manipulate internal control systems that had been strengthened by greater capacities (than villages outside Java). Meanwhile, corruption actors in disadvantaged villages outside of Java with a lower quality of human development and minimal infrastructure support than the island of Java require less effort to manipulate the existing internal control system. Because this study's design does not focus on the relationship between corruption and the human development index or infrastructure support, this topic requires further investigation.

Profiling Corruption Perpetrators, the Loss, and Corrupted Targets

The results showed that the perpetrators of corruption in 186 villages were all village government officials and 90.32% involved village chiefs. The remaining 9.68% involved the village treasurer in every instance. In this study, the two village government officials tended to work alone or did not involve other perpetrators. Namely, in 122 cases, the village head involved up to 104 people and the village treasurer up to 18 people. The involvement of village chiefs in corruption cases is the dominant number in each region, as depicted in Figure 5.

The distribution of losses as a function of the number of corruption perpetrators is dominated by one person (65.59%), followed by two people (5.38%), and then three people (5.38%). The highest loss value investigated tends to increase from IDR 50 million for one

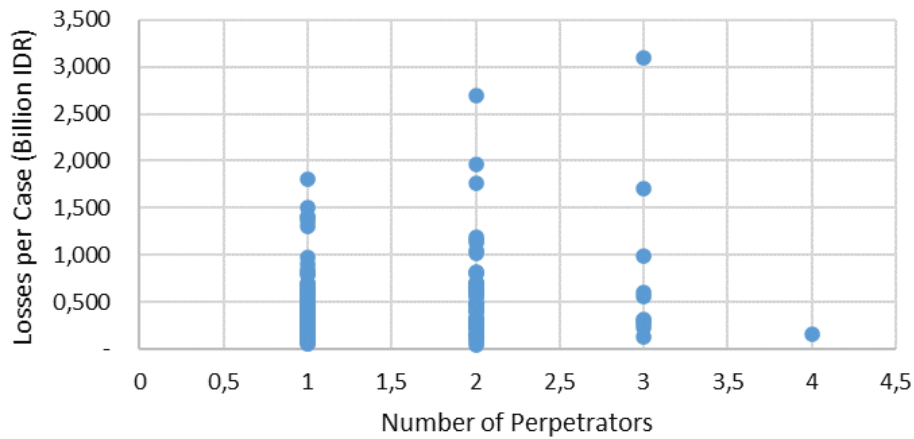


Figure 6. Distribution of Loss Value per Number of Corruption Perpetrators in the Village

person to IDR 3.1 billion for three perpetrators (see Figure 6). The Village Secretary, Members of the Activity Management Team, Heads of Village Consultative Bodies, Contractors, and Members of the Local Parliament are also involved. The tendency to crack down on cases involving a single perpetrator and circumstances in which the increase in the value of losses is directly proportional to the increase in the number of perpetrators is consistent with the ACFE’s (2022) findings. Different conditions are demonstrated in the case of the perpetrator of four murders, but the loss is estimated to be less than IDR 100 million. This condition is a subject that requires additional study.

Furthermore, corruption in villages affected the most expenditures, specifically 175 cases, as seen in Figure 7. The scheme may involve fraud in preparing financial statements, theft of money, spending for personal gain, and falsifying proof of transaction, including creating bills without transactions or being fictitious. In up to five cases, the next target is revenue; in up to three cases, it combines revenue and expenditure. Illegal fees and falsification of proof of transactions/receipts are examples of corruption schemes involving the revenue component. Moreover, rare instances of corruption involve assets in up to two instances and financing/ investing in one.

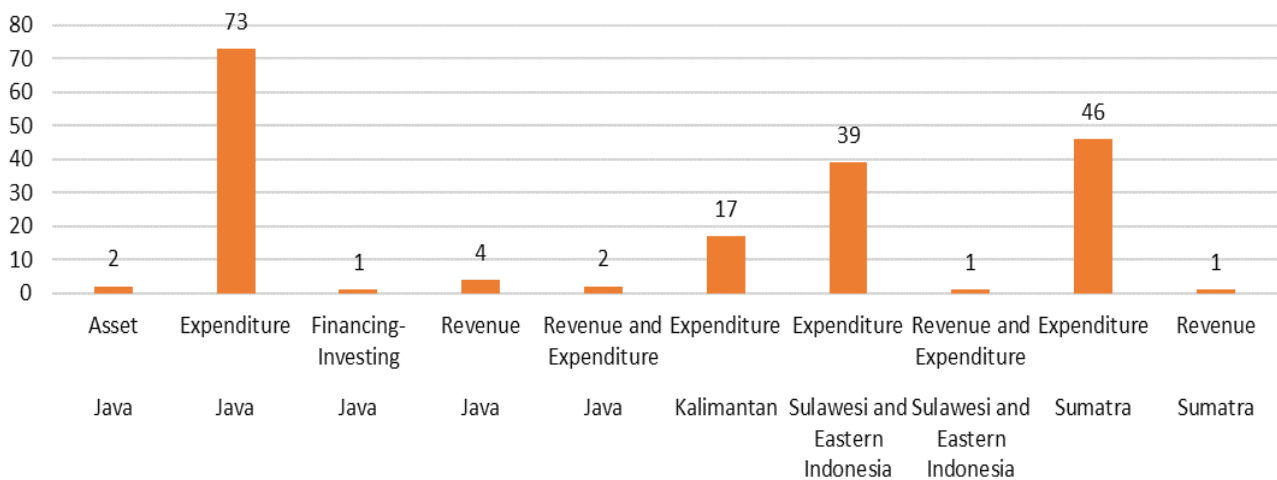


Figure 7. Financial Statement Account Targeted in Village Corruption Case

The distribution of corruption cases on the island of Java tends to target a greater variety of financial statement components than in other regions. This condition shows the need to increase the ability of financial managers in villages, members of the Village Consultative Body, and the Government Internal Supervisory Apparatus (Aparat Pengawasan Intern Pemerintah, APIP) on the island of Java to detect corruption schemes in all financial statement components. However, this does not imply that the corruption scheme does not exist in other regions and therefore does not require study. As the primary target of corruption actors in each region, expenditure accounts must take precedence when selecting samples for review, audit, or investigation.

Although incomplete in profiling corruption perpetrators in villages, this study presents the impact of corruption per village and region that Taqi et al. (2021) and Zakariya (2020) cannot describe. Additional information on the number of corruption perpetrators per case and account targets in the financial statements enriches the discussion of prior research. It can be utilized as a guide by each auditor or law enforcement agency in planning detection policies (in the form of audits or investigations). The incomplete description of the perpetrators' profile in this study is that the motive, age, and gender of corruption perpetrators in the village have not been presented, as researched by Hakami et al. (2020), Prita et al. (2020), and Sinarto (2018). Due to the limited information obtained from secondary data, this condition cannot be discussed in the present study.

In terms of developing corruption prevention policies in rural areas, profiling actors is also important. Law enforcement agencies (police, prosecutors, and Corruption Eradication Commission) must engage in anti-corruption activities, such as socialization and seminars, to demonstrate their support for the lower levels of society. This activity also necessitates a substantial budget to reach all Indonesian villages (74,961 villages). By understanding the pattern of corruption cases, implementers can prioritize villages with particular characteristics as the locus of socialization activities.

Measuring the Pace of Village Corruption Detection Compare from the Early Period of a Case

Before measuring the detection pace, the author attempted to analyze the period during which each region's perpetrators committed corruption. This helps determine the effectiveness of preventive measures (e.g., the socialization of anti-corruption policies) and detection measures (e.g., audits and investigations). The average time for perpetrators committing corruption in 186 villages was 1.76 years. There are two regions with below-average corruption periods: the islands of Java (1.59 years) and Kalimantan (1.71 years). Meanwhile, Sumatra, Sulawesi, and Eastern Indonesia have an average case duration of 1.79 and 2.13 years, respectively. The authors grouped by region to determine the maximum impact of corruption case losses per corruption period. From this grouping, it was determined that village corruption perpetrators on Java Island caused the largest loss of IDR 3.1 billion within two years (see Fig-

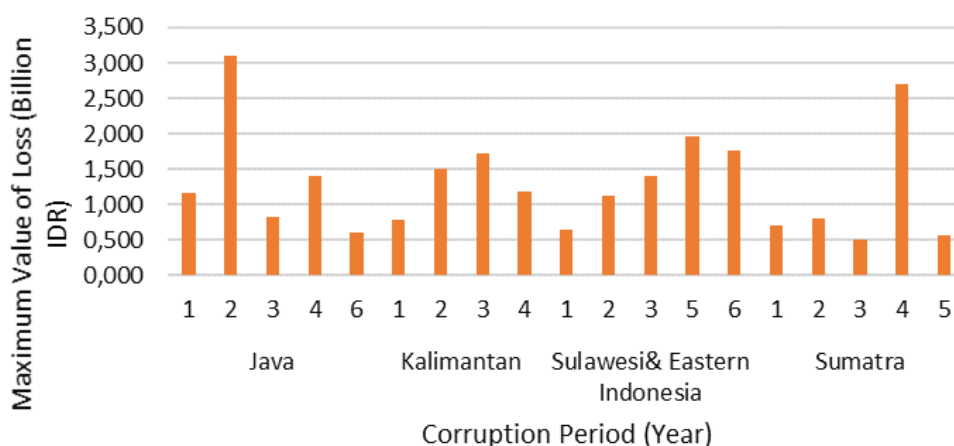


Figure 8. Period of Corruption (per Year) by Region

ure 8). Over four years, the Sumatra region sustained the greatest loss amount, totaling IDR 2.7 billion. Meanwhile, the Kalimantan region’s corruption costs a maximum of IDR 1.7 billion over three years. Finally, Sulawesi and Eastern Indonesia have a maximum loss value of IDR 1.9 billion and a duration of 5 years. This condition necessitates a swift detection policy so that losses do not increase in value.

In this study, the pace of corruption detection was calculated as the difference between the investigation’s start date and the corruption period’s beginning year (assumption January 1, 20XX). This time difference is at least zero (0) (the year of the occurrence of corruption coincides with the year of the investigation), the longest is seven years, the middle value is three years, and the average value is 2.72 years (national) in 186 corruption cases.

The average delay in detecting corruption in Java was 2.43 years lower than the national average and lower than the region surrounding Java (an average of 2.93 years). This condition shows the disparity between the rate of investigation detection by law enforcement officials on the island of Java and outside the island of Java. Another issue that needs to be addressed is the tendency of delays in the detection of corruption continues to increase from year to year, both nationally, on the island of Java, and beyond Java Island, as illustrated in the Appendices.

Comparing the period of corruption with the delay in detection, this study determined that the pattern of case enforcement on the island of Java includes the successful restriction of the distribution of corruption periods between 1–2 years (delay in detection in 1–3 years). As illustrated in Figure 9, even though the distribution of the corruption period for the island of Sumatra is identical to that of the island of Java (1–2 years), the distribution of detection delays is typically longer, ranging between 2 and 4 years from the onset of corruption. The distribution of delays in detecting corruption in Sulawesi and Eastern Indonesia is comparable to that of Sumatra (2–4 years), but the distribution of corruption periods is higher (1–3 years). The Kalimantan region resembles that of Sulawesi and Eastern Indonesia in many ways.

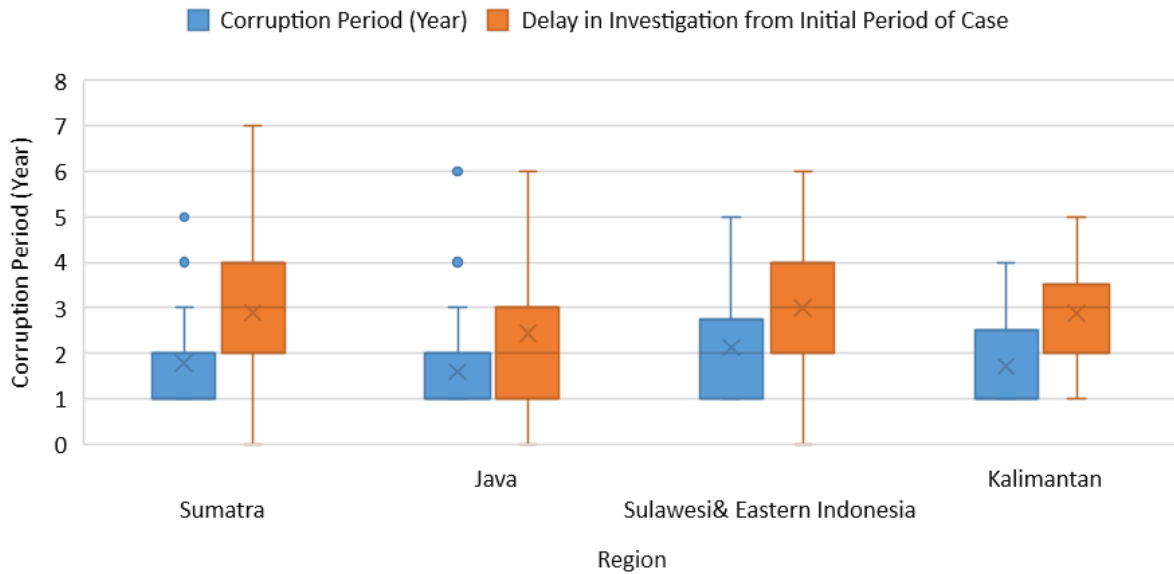


Figure 9. Comparison of the Corruption Period with the Investigation Delay Period per Case

The pattern of the corruption period and the pace of detection of village corruption cases in this study can be used to describe, on a smaller scale, the occurrence of corruption as studied by ACFE (2022), Mugellini et al. (2021), and Yunan et al. (2023). This detection pattern is important as a guide for auditors and law enforcement to evaluate the capacity of their human resources or infrastructure in each region. The greatest need is for the distribution of qualified investigators and auditors outside of Java. According to ACFE (2022), if the detection time interval is longer than the corruption period, it will be more difficult to disclose corruption cases because the perpetrator will have more time to conceal evidence of the crime.

The study's description of the delay in detection demonstrates the inefficiency of law enforcement investigations. However, the author is aware that investigators (whether police or prosecutors) require a minimum of two preliminary pieces of evidence (KUHAP) to conduct an investigation. This evidence may consist of witness testimony, expert testimony, letters, instructions, and the defendant's testimony. Meanwhile, the sufficiency of evidence includes the completeness of preliminary evidence to support the investigators' identification of suspects. This condition may be the reason why investigators take so long to initiate their investigations. However, this study was not intended to describe the investigation process and underlying factors. Therefore, authors further highlight the ability of parties outside the investigator as early whistleblowers in corruption cases. According to prior research, the initial detection of corruption is facilitated by the whistleblower system, management review, and audit report.

With this description, if there is a delay in detecting corruption in the village, the parties that must be evaluated are the effectiveness of the whistleblower system, the level of management vigilance, and the auditor's speed in detecting the audit program. As the smallest government unit in Indonesia, villages must have the same capacity for detecting corruption as

other government units. By understanding the impact of village corruption, the government, as a policymaker, must develop policies that support areas of detection by the whistleblower system, management vigilance, and audit policies.

Currently, the government's auditing efforts are limited to compliance audits conducted by the District/City Inspectorate. To evaluate budget execution and the prevention of corruption, a financial audit that generates opinions is required. Financial statement audits can measure and present information between reporting periods (fiscal years) to make decision-making materials more comprehensive. Auditing and its types are important, but it warrants further study.

CONCLUSION

Java is more focused than other regions on prosecuting corruption cases in rural areas. Corruption in Java and Sumatra tends to target villages with a developing status. However, in Kalimantan, Sulawesi, and Eastern Indonesia, it focuses more on disadvantaged villages. There is a tendency for the impact of losses to increase in proportion to the degree of village development on Java Island. The distribution of impact losses is uniform for villages on the island of Sumatra, but there are variations among villages with developing status.

Meanwhile, in Kalimantan, Sulawesi, and Eastern Indonesia, villages with disadvantaged and very disadvantaged status suffered the greatest loss, followed by advanced and developing status. The pattern of village corruption in Java is consistent with previous studies (Prabowo et al., 2017; Prabowo & Cooper, 2016; Yunan et al., 2023). The corruption pattern in Kalimantan, Sulawesi, and Eastern Indonesia is consistent with the results of Fiorino et al. (2012), Rose-Ackerman and Palifka (2016), also Yang et al. (2017). In Indonesia, village corruption prevention policies require a tool or mechanism to measure and detect their impact early. This is because most corruption perpetrators are the highest village leaders (village heads), followed by the highest financial function holders (treasurers), and the majority are lone corrupt actors. However, if the increase of corrupt actors increases by two to three people, there is a tendency for the losses to increase as well. This is in accordance with the ACFE (2022) report and Cohen (2020) and differs from the results of Taqi et al. (2021) and Zakariya (2020), who only focused on the role of the village head.

Another factor supporting the need for prompt detection is the delay in enforcement by law enforcement officials (investigations). The average delay in enforcement in this study was 2.72 years. This number is reduced for the Java region and increased for regions outside of Java. This condition shows that rural communities, village officials, and internal government supervisors outside Java require a more sophisticated detection strategy. If this detection is late, the amount of loss incurred will increase. In addition to the detection strategy, the Financial Audit Agency must develop regular audit/inspection policies for villages, increase APIP capacity, and implement information systems. This is due to the increasing prevalence of corruption

targets on Java Island, which are not limited to expenditure schemes. Moreover, regular audits/checks are important because they can reduce the likelihood of corruption (Mugellini et al., 2021; Olken, 2007). Although it is possible to detect corruption based on public information (whistleblower), the increase in participation against the backdrop of kinship is corruption (Olken, 2007), and the public requires law enforcement to be fast and accurate with investigative audit procedures and then continued investigations (Dewi et al., 2021; Taylor, 2018).

BPK and internal auditors can use the results of this study to develop policies for routine village financial audits. This study can also be used to determine the targets and locations of villages to receive detection policy interventions and/or audit/supervision sampling tests conducted by the APIP. This study suggests the importance of determining regular audits or other detection policies for villages with certain attributes (i.e., regions, development, trend of perpetrators profile, and trend of fraud scheme). This study has not been able to provide a comprehensive profile of corruption perpetrators in villages as Hakami et al. (2020), Prita et al. (2020), also Sinarto (2018) because it does not describe variables like age, gender, detection model, and most importantly, the motive for committing the crime. This motive is important for the prevention approach to corruption, as greed-driven corruption is undoubtedly distinct from economic factors (ACFE, 2022; Prita et al., 2020; Sinarto, 2018). In addition, the scope of this study can be examined more broadly by incorporating variables such as human development quality and infrastructure support. Including these variables to evaluate all aspects of the government's detection and auditing policies is important.

REFERENCES

- ACFE. (2022). *Occupational fraud 2022: A report to the nations*. Association of Certified Examiners (ACFE). <https://acfe-public.s3.us-west-2.amazonaws.com/2022+Report+to+the+Nations.pdf>
- Antons, D., Grünwald, E., Cichy, P., & Salge, T. O. (2020). The application of text mining methods in innovation research: Current state, evolution patterns, and development priorities. *R and D Management*, 50(3), 329–351. <https://doi.org/10.1111/radm.12408>
- BBC News Indonesia. (2022, February 24). Status tersangka Nurhayati resmi dibatalkan Kejaksaan - mengapa saksi pelapor korupsi 'belum cukup terlindungi'? *BBC News Indonesia*. <https://www.bbc.com/indonesia/indonesia-60492886>
- BPK RI Official (2021, September). *Workshop Anti Korupsi Seri II*. (Video). <https://www.youtube.com/watch?v=T86CiiQTN6A>
- BPKP. (2007). *Fraud control plan*. https://www.bpkp.go.id/public/upload/unit/investigasi/files/Gambar/PDF/fraud_control_plan.pdf
- Brand, S., & Price, R. (2000). *The economic and social costs of crime*. Home Office Research Study
- Chalfin, A. (2015). Economic costs of crime. In *The encyclopedia of crime and punishment*, 1–12. <https://doi.org/10.1002/9781118519639.wbecpx193>

- Cohen, M. A. (2020). *The cost of crime and justice*. Routledge, Taylor & Francis Group. <https://doi.org/10.4324/9780429431562>
- Cordery, C. J., & Hay, D. (2019). Supreme audit institutions and public value: Demonstrating relevance. *Financial Accountability and Management*, 35(2), 128–142. <https://doi.org/10.1111/faam.12185>
- Dewi, H. R., Mahmudi, M., & Maulana, R. (2021). An analysis of fraud tendency of village government officials. *Jurnal Akuntansi & Auditing Indonesia*, 25(1), 33–44. <https://doi.org/10.20885/jaai.vol25.iss1.art4>
- Dewi, S. S., & Arif, M. (2021). *Analisis dampak dana desa terhadap pembangunan wilayah di Kabupaten Klaten* (Undergraduate thesis, Universitas Muhammadiyah Surakarta). UMS Library. <http://eprints.ums.ac.id/id/eprint/95305>
- Ferry, L., & Ahrens, T. (2021). The future of the regulatory space in local government audit: A comparative study of the four countries of the United Kingdom. *Financial Accountability and Management*, 38(3), 376–393. <https://doi.org/10.1111/faam.12291>
- Fiorino, N., Galli, E., & Petrarca, I. (2012). Corruption and growth: Evidence from the Italian regions. *European Journal of Government and Economics*, 1(2), 126–144. <https://doi.org/10.17979/ejge.2012.1.2.4281>
- Hakami, T. A., Rahmat, M. M., Yaacob, M. H., & Saleh, N. M. (2020). Fraud detection gap between auditor and fraud detection models: Evidence from Gulf Cooperation Council. *Asian Journal of Accounting and Governance*, 13(June), 1–13. <https://doi.org/10.17576/ajag-2020-13-01>
- Heeks, M., Reed, S., Tafsiri, M., & Prince, S. (2018). *The economic and social costs of crime*. Home Office Research Studies. <https://assets.publishing.service.gov.uk/media/5b684f22e5274a14f45342c9/the-economic-and-social-costs-of-crime-horr99.pdf>
- Indonesia Corruption Watch. (2017). Tren penindakan kasus korupsi 2016. <https://icw.or.id/Zzd>
- Indonesia Corruption Watch. (2018a). Tren penindakan kasus korupsi 2017. <https://icw.or.id/ZNS>
- Indonesia Corruption Watch. (2018b). Tren penindakan kasus korupsi 2018. <https://antikorupsi.org/id/article/tren-penindakan-kasus-korupsi-2018>
- Indonesia Corruption Watch. (2020). Tren penindakan kasus korupsi 2019. <https://icw.or.id/ZQA>
- Indonesia Corruption Watch. (2021). Tren penindakan kasus korupsi 2020. <https://icw.or.id/nZU>
- Indonesia Corruption Watch. (2022). Tren penindakan kasus korupsi 2021. <https://icw.or.id/ZJcj>
- Kementerian Desa Pembangunan Daerah Tertinggal dan Transmigrasi. (2017). *Standar operasional prosedur pemutakhiran status desa dengan indeks pembangunan desa*. Kementerian Desa Pembangunan Daerah Tertinggal dan Transmigrasi
- Leung, P., Coram, P., Cooper, B. J., & Richardson, P. (2015). Modern auditing and assurance services. In *Massey University: Auditing Customised Text* (6th ed.). Wiley.
- Mamahit, A. I. (2018). *Deteksi fraud pada sektor pemerintahan* [Master's thesis, Universitas Islam Indonesia]. UII Library Repository. <https://dspace.uui.ac.id/>

handle/123456789/12670

- Mecca, B., Mafira, T., Muluk, S., & Larasati, L. (2021). *Indeks Desa Membangun Plus (IDM+): Meningkatkan insentif langsung untuk pemanfaatan lahan yang berkelanjutan*. https://www.climatepolicyinitiative.org/wp-content/uploads/2020/11/Indeks-Desa-Membangun-Plus-IDM_Meningkatkan-Insentif-Langsung-untuk-Pemanfaat.pdf
- Mechtenberg, L., Muehlheusser, G., & Roider, A. (2020). Whistleblower protection: Theory and experimental evidence. *European Economic Review*, 126(103447), 1–34. <https://doi.org/10.1016/j.euroecorev.2020.103447>
- Mugellini, G., Bella, S. D., Colagrossi, M., Isenring, G. L., & Killias, M. (2021). Public sector reforms and their impact on the level of corruption: A systematic review. *Campbell Systematic Reviews*, 17(2). <https://doi.org/10.1002/cl2.1173>
- Murphy, S. A. (2013). Data visualization and rapid analytics: Applying tableau desktop to support library decision-making. *Journal of Web Librarianship*, 7(4), 465–476. <https://doi.org/10.1080/19322909.2013.825148>
- Nassaji, H. (2015). Qualitative and descriptive research: Data type versus data analysis. *Language Teaching Research*, 19(2), 129–132. <https://doi.org/10.1177/1362168815572747>
- Nirmala, K., & Pushpa, M. (2012). Feature-based text classification using application term set. *International Journal of Computer Applications*, 52(10), 1–3. <https://doi.org/10.5120/8235-1439>
- Olken, B. A. (2007). Monitoring corruption: Evidence from a field experiment in Indonesia. *Journal of Political Economy*, 115(2), 200–249. <https://doi.org/10.1086/517935>
- Perry, J. (2021). *Trust in public institutions: Trends and implications for economic security*. United Nations, Department of Economic and Social Affairs Social Inclusion. <https://www.un.org/development/desa/dspd/2021/07/trust-public-institutions/>
oAwww.un.org/development/desa/publications/
- Prabowo, H. Y., & Cooper, K. (2016). Re-understanding corruption in the Indonesian public sector through three behavioral lenses. *Journal of Financial Crime*, 23(4), 1028–1062. <http://dx.doi.org/10.1108/JFC-08-2015-0039>
- Prabowo, H. Y., Cooper, K., Sriyana, J., & Syamsudin, M. (2017). De-normalizing corruption in the Indonesian public sector through behavioral re-engineering. *Journal of Financial Crime*, 24(4), 552–573. <https://doi.org/10.1108/JFC-10-2015-0057>
- Pramudyastuti, O. L., Rani, U., Prativi, A., Fitri, G., Susilo, A., Tidar, U., Kapten, J., No, S., Magelang, K., & Tengah, J. (2021). Pengaruh penerapan whistleblowing system terhadap tindak kecurangan dengan independensi sebagai moderator. *Jurnal Ilmiah Akuntansi*, 6(1), 115–135. <https://ejournal.undiksha.ac.id/index.php/JIA/article/download/32335/18497/0>
- Prasetya, Y. E., Dinanti, D., & Hidayat, A. R. R. T. (2020). Karakteristik pelayanan infrastruktur teknologi informasi dan komputer serta indeks desa berkembang di Kabupaten Probolinggo. *Planning for Urban Region and Environment Journal (PURE)*, 9(1), 125–132. <https://purejournal.ub.ac.id/index.php/pure/article/view/39>
- Presidential Decree Number 54 of 2018 concerning the National Strategy of Corruption Prevention (Keputusan Presiden Nomor 54 Tahun 2018 tentang Strategi Nasional Pencegahan Korupsi). <https://peraturan.bpk.go.id/Details/85918/perpres-no-54-tahun-2018>
- Prihatmanto, H. N., Artha, A. D., Joyonegoro, M. R., Munajat, M. D. E., & Irawati, I. (2022). Recognizing and detecting patterns of village corruption in Indonesia. *Integritas: Jurnal*

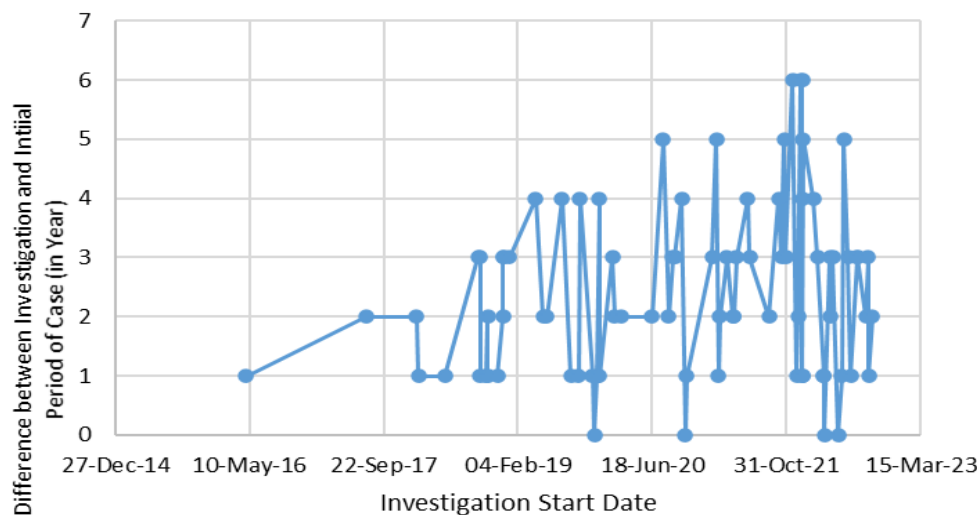
Antikorupsi, 8(2), 205–220. <https://doi.org/10.32697/integritas.v8i2.940>

- Prita, D. S. S., Wardayat, S. M., Liyati, E., & Firly M. S. A. (2020). Profiling selebriti fraud: Analisis profil koruptor di Indonesia. *Jurnal Akuntansi Dan Pajak*, 20(2), 266–275. <http://dx.doi.org/10.29040/jap.v20i2.874>
- Rose-Ackerman, S., & Palifka, B. J. (2016). *Corruption and government: Causes, consequences, and reform* (2nd ed.). Cambridge University Press. <https://doi.org/10.1017/CBO9781139962933>
- Saleh, L. O. I. H., & Ratmono, D. (2017). Analisis pengaruh korupsi terhadap audit pemerintah pada instansi pemerintah di Indonesia. *Diponegoro Journal of Accounting*, 6(1), 1–13. <https://ejournal3.undip.ac.id/index.php/accounting/article/view/18285/17364>
- Sekretariat Nasional Pencegahan Korupsi. (2021). *Laporan pelaksanaan strategi nasional pencegahan korupsi tahun 2020*. <https://www.stranaspk.id/publikasi/laporan-aksi/laporan-pelaksanaan-strategi-nasional-pencegahan-korupsi-triwulan-iii-tahun-2021>
- Seza, D. O., Sumardjo, M., & Ermawati, E. (2020). *Analisis penerapan whistleblowing system dalam rangka penegakan integritas pada Badan Pemeriksa Keuangan*. <https://api.semanticscholar.org/CorpusID:225999630>
- Sinarto, B. P. (2018). *Analysis of corruptors' demography to prevent corruption (study on court judgment at Bandung District)* [Undergraduate thesis, Parahyangan Catholic University]. UNPAR Institutional Repository. <https://lppm.stiekesatuan.ac.id/index.php/e-proceeding/article/download/590/440>
- Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, 104(March), 333–339. <https://doi.org/10.1016/j.jbusres.2019.07.039>
- Sukarno, M. (2020, Desember 1). *Analisis pengembangan potensi desa berbasis indeks membangun desa (IDM) (studi kasus: Desa Ponggok, Kecamatan Palohharjo, Kabupaten Klaten)* [Paper Presentation]. 1st International Conference Edusaintech, FMIPA Unimus, Semarang, Indonesia. <https://prosiding.unimus.ac.id/index.php/edusaintek/article/viewFile/596/597>
- Šumah, Š. (2018). Corruption, causes, and consequences. In V. Bobek (Ed.), *Trade and Global Market* (pp. 63–80). IntechOpen. <https://doi.org/10.5772/intechopen.72953>
- Suprajadi, L. (2009). Teori kecurangan, *fraud awareness*, dan metodologi untuk mendeteksi pelaporan keuangan yang curang. *Bina Ekonomi: Jurnal Ilmiah FE Unpar*, 13(2), 52–58. <https://journal.unpar.ac.id/index.php/BinaEkono%20%20mi/article/view/722>
- Susilo, W. D., Angraeni, S., & Partohap, T. H. (2019). Survei penilaian integritas: Alternatif pengukuran kinerja pemberantasan korupsi. *Jurnal Antikorupsi Integritas*, 05(2), 165–189. <https://jurnal.kpk.go.id/index.php/integritas/article/view/478>
- Sutarsa, I. N. (2014). Strategi penanggulangan korupsi di sistem pelayanan kesehatan yang integratif dan komprehensif. *The Ary Suta Center Service on Strategic Management*, 26, 161–191.
- Suyatmiko, W. H. (2021). Interpreting the decline in Indonesia's corruption perception index score in 2020. *Integritas: Jurnal Antikorupsi*, 7(1), 161–178. <https://doi.org/10.32697/integritas.v7i1.717>
- Taqi, M., Ismail, T., Meutia, M., Sabaruddinsah, S., & Arifin, B. (2021). Village fund financial fraud prevention model using analytical hierarchy process method. *Jurnal Organisasi Dan Manajemen*, 17(2), 203–216. <https://doi.org/10.33830/jom.v17i2.1366.2021>

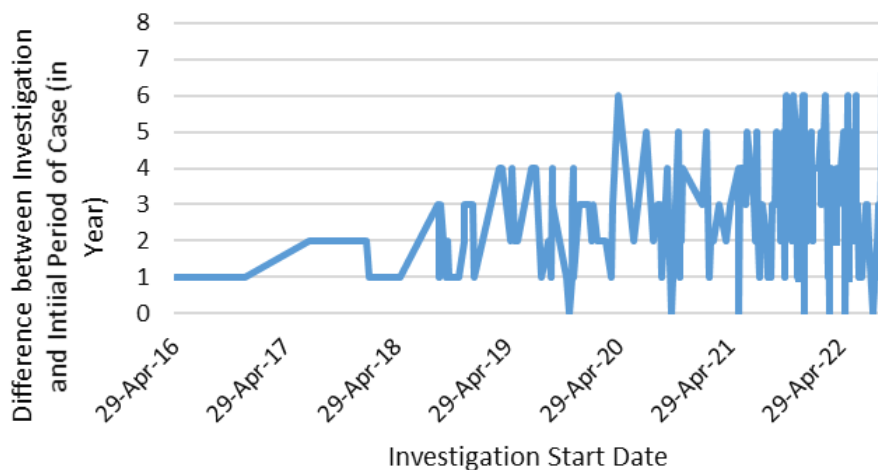
- Taylor, J. (2018). White-collar crime and the law in nineteenth-century Britain. *Business History*, 60(3), 343–360. <https://doi.org/10.1080/00076791.2017.1339691>
- Transparency International. (2020). *Global corruption barometer Asia 2020: Indonesia*. <https://ti.or.id/global-corruption-barometer-2020-indonesia/>
- Transparency International. (2021). *Corruption perceptions index*. <https://www.transparency.org/en/cpi/2021>
- Yang, F., Wu, H., & Yang, W. (2017). Research on the relationship between regional corruption and the performance of listed companies. *Advances in Economics, Business, and Management Research (AEBMR)*, 37(2016), 1–20. <https://doi.org/10.2991/ictim-17.2017.1>
- Yunan, Z. Y., Freyens, B., Vidyattama, Y., & Mohanty, I. (2023). Spread of corruption in Indonesia after decentralization: A spatiotemporal analysis. *Oxford Development Studies*, 51(2), 1–18. <https://doi.org/10.1080/13600818.2022.2162493>
- Zakariya, R. (2020). Partisipasi masyarakat dalam pencegahan korupsi dana desa: Mengenal modus operandi. *Jurnal Integritas*, 6(2), 263–282. <https://doi.org/10.32697/integritas.v6i2.670>

APPENDICES

Appendix 1. Delay in Detection of Corruption Cases from 186 Villages in Indonesia



Appendix 2. Delay in Detection of Village Corruption Cases in Java



Appendix 3. Delay in Detection of Village Corruption Cases Outside of Java Region

