

CORRUPTION AND DEFORESTATION IN INDONESIA

ALES PACHMANN¹

AMBIS (Czech Republic)

ABSTRACT

This paper evaluates the impact of corruption on deforestation in Indonesia. The world's nature environment and global warming questions are one of the main factors of international concerns. Massive deforestation threatens Indonesian biodiversity. This research paper analyses issues of whether deforestation in Indonesia is caused by corruption and supported by crude palm oil production. This issue was questioned earlier by using Engel Granger cointegration test, three time series of data, specifically corruption perception index (CPI), rate of deforestation and price of crude palm oil that was inspected for a long-run relationship. Yet long-run relationship was not found. The author of this article shows that while answering this question, CPI values are not as important as the very nature of corruption in Indonesia. However, CPI is still extremely high in Indonesia as the nature of corruption is convenient for illegal logging. Thus, international response is needed so that to decrease the level of deforestation in Indonesia. With the new European Union Law that requires legal sourcing of wood products, Indonesia commits to enforce new rules in the Asia's largest rainforest. For example, FLEGT licensing became operational on November 15, 2016. The European Union is strictly enforcing these rules what is a good step against deforestation in hand with illegal logging in Indonesia. In this way to analyse in detail the FLEGT programme and the EU activities, is beyond the scope of this paper. There stays questioned the Indonesian Presidents' ban on new palm oil plantations and mining licence, because such approach can potentially increase corruption and unofficial economy at local levels. The author of this paper wants to fulfil the gap in understanding about the link between deforestation in Indonesia and corruption. The level of corruption in Indonesia is not the main issue, but the nature of corruption is the main problem.

KEYWORDS: *corruption, FLEGT licensing, deforestation, international relations.*

JEL CODES: D73, Q2, Q5,

DOI:

Introduction

Petr Procházka, together with his colleagues Mansoor Maithem and Osama Eldeeb (2015), said that deforestation in Indonesia is a major problem to be solved. They attempted to justify the claim that deforestation in Indonesia is caused by corruption and is supported by the production of crude palm oil (CPO). Using the cointegration approach, they used three time series of data, in particular the Corruption Perception Index (CPI), the deforestation rate and the price of crude palm oil (CPO). The test results show that there is no long-term relationship between these variables. The authors consider these results, but there are several reasons for them. Firstly, corruption in Indonesia, measured by CPI, is still very high. This may mean that uncontrolled deforestation is still allowed or not under control. Similarly, the analysis shows that the price of CPO does not affect deforestation. This is probably a very low shut-down price for CPO, which is economical even at lower price levels (Eldeeb, Procházka, Maitah, 2015).

The aim of this paper is to analyse and synthesize available information on how nature of corruption influences the phenomenon of illegal logging in Indonesia. This paper makes a framework for further scientific research in this field. Strategies commonly used in qualitative research are case studies, ethnography, grounded theory and action research (Collis, Hussey, 2003). In this paper, the author uses grounded theory, which

¹ Ales Pachmann – Department of Security and Law, AMBIS, a.s. Prague, Žalanského 68/54, 163 00 Prague 17 – Řepy, Czech Republic
E-mail: ales.pachmann@ambis.cz

is based on historical facts and results of contemporary knowledge on issues of the nature of corruption. The author of this article, among other things, conducted research, examining the issue of corruption in Indonesia between 2007–2010 based on observer coverage and analysed the related case study of Neue Maschinenbau Halberstadt GmbH project.

“Corruption research suffers from a lack of trusted primary and secondary data. Qualitative methods besides traditional quantitative studies can be an interesting way to do research on corruption” (Lee, Eden, 2010).

The knowledge that was obtained by analytical procedure was later connected to a new whole, which was the synthesis. The paper analyses information on the nature of corruption in Indonesia as well as causes of corruption in connection with deforestation in Indonesia. Analysis is one of the logical scientific methods. This is a factual process or the thought distribution of the whole into individual parts. Through it, the properties, relationships and facts that proceed from the whole to these disassembled parts are analysed. This analysis allows us to uncover different pages and properties of individual phenomena and processes, their construction, contradictions, etc. When performing the analysis, we separate essential information from insignificant, distinguish permanent relationships from those random ones. When analysing, we proceed from top to bottom with the logical system (Molnár, 2012: 42). On the other hand, synthesis proceeds from a part to a whole, from the analysis it goes, i.e., from the bottom to the top. It combines knowledge gained by analytical approach, forming the basis for the right decision and revealing essential connections. However, it is not just the composition of individual parts, but also the discovery of new relationships and laws (Molnár, 2012: 42).

“Everyone knows that forests are the lungs of our planet. However, the pressure on forests is insistent and their destruction is much faster than they can recover. This deforestation accounts for more than 17 percent of the world’s annual carbon emissions; in fact, forestry and logging outweigh the global transport sector in their emissions. If we want to fight climate change, it is clear that mitigating the impact of deforestation should be a key priority. To address this issue, UN member states have put forward an initiative as part of the Framework Convention on Climate Change. Known as REDD + (reducing emissions from deforestation and forest degradation), it directly combines financial incentives to protect the carbon stored in forests, thus linking financially to forest protection. REDD + recognizes that forests, such as absorbers and carbon stocks, play a decisive role in any response to climate change” (Transparency, 2011).

“Many REDD + target countries have poor records regarding transparency and accountability. For example, Indonesia earns from REDD + after approval between USD 400 and USD 2 billion a year. Papua New Guinea also attracts significant funding for REDD +” (Transparency, 2011).

1. Corruption

The word “corruption” is of Latin origin, based on the word *rumpere* basis, i.e. ‘break’. The semantic analysis of this term is of limited importance. Still, it is worth thinking about. The Latin word *corruptus* denotes the consequence of such a break, and the one who has suffered it is then corrupt, perverse. There is no doubt that interest in the phenomenon of corruption draws us into the world of moral judgments, rules, norms and violations, and also individual or collective efforts to deal with them. Corruption was defined in this way by P. Frič in his publication on corruption in the Czech way (Frič et al., 1999). From the point of view of etiology, the word “corruption” is perhaps the oldest definition of the meaning of corruption. P. Frič also points to the fact that a corrupt person may not only be a person but also a whole institution or a system. He also points out that from the times of Plato, the concept of corruption is known as an institutional bankruptcy. Plato considered tyranny as the insolvent form of the monarchy, because instead of being governed by law, it serves only the interests of a tyrant (Frič et al., 1999). The simplest definition of corruption is understood as the act of “abusing public authority for personal gain” (Lambsdorff, 2007).

Definitions of this type occur both in the daily press and in professional publications and articles. Corruption in a broad sense encompasses all public behaviour that deviates from formally defined obligations in order to achieve private financial or material gain. The concept of corruption thus includes both bribery and nepotism, and clientelism (favouring relatives or acquaintances) (Muller, Laboutková, Vymětal, 2010).

2. The nature of corruption in Indonesia

In their work, the authors A. Schleifer and R. W. Vishny (Shleifer, Vishny, 1993) state that the nature of corruption varies from country to country. In some countries, corruption is organized and predictable. This practice may be illustrated by an example from the Indonesia *dutiny* era of Suharto: President Suharto had the nickname “Ten Percent”, which he won in Indonesia, because foreign companies trading on the local market are expected to pay a relatively well-defined bribe to the president or members of his family (Wei, 2000). A. Schleifer and R. W. Vishny think they are counter-polar such a scheme of the Russian Federation in 1991. If someone wanted to start a business, so it was necessary to bribe local lawmakers, central ministry, local authority, fire department, water management, etc. In some African countries, there are many quasi-monopolistic state offices holding the power to stop the project and use it in away so that to claim bribes without coordination with other authorities. The army and the police also often require funding for protection. Such situations lead to a reduction of investors’ interest in the country (Shleifer, Vishny, 1993). J. G. Lambsdorff (2004) and J. K. Hansen (2004) concluded that what deterred foreign direct investors was not necessarily the extent of corruption but its nature. The correlation between corruption and weak economic performance is not absolute. Moreover, the high degree of corruption is more destructive under certain conditions than in other cases (Rose-Ackerman, 1999). The number of bribes is not a critical factor, we also want to know what has really been made about these bribes. Therefore, a detailed analysis is needed, i.e., state-to-state and sector-by-sector analysis. It can be stated that corruption is a global phenomenon, which has different forms, levels, causes and consequences in different countries (Osugwu, 2010). Some authors, such as A. Schleifer and R. W. Vishny (1993), suggest that the nature of corruption varies considerably across countries. In some countries, corruption is hierarchical, organized and predictable, one bribe guarantees access to the service or property required. In other countries, corruption is confused, independent, and unpredictable. J. K. Hansen (2004), emphasizing the nature of corruption in separate countries, emphasizes the type of corruption, the corruption network, and the issue of centralization of corruption. Yet J. G. Lambsdorff (2004) emphasizes the aspects of great/petty corruption.

The nature of corruption can be assessed from the point of view of foreign investors as follows:

1. Type of corruption: active, practical, passive. An active type of corruption means that the active party is a direct foreign investor in corruption operations. A practical type of corruption means that direct foreign investors pay bribes, in particular seeking to speed up certain processes. A passive type of corruption means that public officials themselves demand bribes for their services.

2. Organization of corruption: centralized, decentralized. Centralized corruption means that corruption is organized from the highest level, i.e., top officials of the public power and political representation. It is characterized as relative certainty when the investor knows to whom and how much to pay. Decentralized corruption means that individual government departments do not co-operate on corruption operations, and the investor has no certainty and insight into how much and to whom he/she will have pay.

3. Corruption networks: open, closed. Open corrupt networks mean that there is no problem to get into them. In other words, it is relatively easy to find a corrupt partner who gets one into the system and allows him/her to trade. Closed networks mean that the other party is not interested in any way in supporting the investor’s activity. J. K. Hansen investigated which combinations on corrupt markets are acceptable for investors and which are not (Pachmann, 2006).

There was a paradox in Indonesia. President Suharto had the nickname “Ten Percent”, which he gained because it was customary in Indonesia that foreign companies trading on the local market had to pay a relatively well-defended bribe to the President or one of his family members. Yet, Indonesia has been a popular destination for foreign direct investments, especially from Japan (Wei, 2000). After the fall of Suharto in 1998, there was a significant decentralization of public administration (Pachmann, 2009), there were series of local mafias and corruption-related opportunities at the local level. In this respect, we can talk about the decentralization of corruption in Indonesia.

At the centrally controlled level, Indonesia has done an excellent job of attracting non-government investment to drive investors from others to invest in government-controlled energy, road, rail and port projects (Forrest, 2011). The cooperation of the author of this article, especially with the German company Neue Maschinenbau Halberstadt GmbH (NMHG), was very beneficial for a closer understanding of the practical side of the matter.

The NMHG project of the time was to install a 10_MW power plant for crude palm oil within an existing power station belonging to PT. PLN Dumai (Sumatra). The Indonesian government financed the contract (directly negotiated with some ministers) launching a pilot project for crude oil palm oil replacing oil use for electricity generation. The case ranged extensively from the Indonesian and the world press (The Jakarta Post, 2008). Franz Komischke and the companies he represented (including NMBH) were very successful in Indonesia over other businesses which the author collaborated with. However, the facility was installed far from Jakarta in the Dumai area. However, problems have begun in the Dumai area. Civil servants have been making trouble with the project and making everything very problematic. The situation in Dumai was in full contrast to the government signing a full-fledged covenant in Jakarta. Dumai was not in control of this, and apparently even a minister could not do anything about it (or it was not his priority). In this case, it is possible to talk about a clear aspect of decentralization of corruption.

3. Causes of corruption in connection with deforestation in Indonesia

The Republic of Indonesia is divided into 33 provinces ('provinsi'), five of which (including, for example, the capital of Jakarta with its own governor) have a special status. The province is further divided into districts ('kabupaten') and cities ('kota'). Provinces, districts and cities have their own elected governments and embassies ('dewan perwakilan rakyat daerah'). Each province is governed by a directly elected governor who, together with members of the provincial legislature, is elected for a period of five years.

Districts and cities are built to the same level within the territorial self-government, but they are always subordinate to the respective provinces. Nevertheless, decentralization of public administration has been given a lot of powers, for example, in setting up and running public schools and public health facilities. Each district is headed by the mayor ('bupati'), then the city of the mayor ('walikota'), who both are elected for a five-years term. Districts and towns are divided into circuits ('kecamatan'). The head of the circuit is the so-called 'camat', who is directly responsible to the mayor. Furthermore, circuits are composed of villages ('desa') led by an elected leader ('kepala desa') and some of the 'kelurahans', who are managed by 'lurahs' appointed by the relevant 'camat', to whom they are responsible. Relationships between the central government and the districts/towns have been determined by the law since 1999. This reflected the fact that the elected mayors of the districts and city mayors did not want to be subordinate to the governors of the provinces. In addition, districts and cities are not directly subordinate to the central government, the relationship between them and the central executive power has been established on a horizontal level. Since 2004, the central government in Jakarta has remained the following agenda: foreign policy; defence (army); internal order and security; finance; judiciary; religion. However, the provincial governor may, under certain circumstances, be relieved of the powers of the lower-level local governments. What principles are based in Indonesia at the local government? Yet, they are as follows: self-sufficiency; its own elected representatives and its own apparatus; own income based in particular on the collection of taxes and the share of profits from the use of local mineral and other resources; the ability to care for the population in the given area and to provide care for its standard of living; promoting democracy and citizens' equality; responsibility for basic education, health and social care and a functioning social system including the operation of social and other public facilities; development planning and efficient use of local resources; environmental care, degradation of local traditions and culture; modelling and discipline enhancement, etc. Based on this enumeration, one can deduct how the local government is financed. By using the principle of self-sufficiency, primarily it must rely on own revenues, the choice of local taxes and the share of profits from the use of immense mineral resources. Particular emphasis is put on the development of agriculture and processing of its production; if

it succeeds, then this effort will be returned to the local self-government in a higher collection of local taxes. Besides, every rural district has a particularly strong agricultural union. It works closely with the cooperative sector and individual farmers, producers of palm oil production (Indonesia is the world's largest producer and plans to increase its production up to 40 million tonnes annually by 2020). A trained apparatus teaches cooperatives and individuals the right, modern agricultural techniques, the establishment of composts, in certain cases (if subsidies from the central government) provides seedlings or seed for free as well as inorganic fertilizer. The state, in turn, co-opts with individual small farmers to favour large growers (for example, more than half of all palm oil production plants are in the hands of large foreign firms). Farmers, for example, for each metric ton of UREA inorganic fertilizer pay less than 120,000 Indonesian rupees (about \$ 12 US dollars) less (Pachmann, 2009). "During the second half of the 20th century the Indonesian forest area as a percentage of the landmass decreased from 74% to 56%" (FAO, 1990b).

"It was not until the New Order of government of Suharto, at the instigation of the World Bank, that there occurred the systematic and rapid exploitation of the forests to finance the increasing foreign debt and to tackle the 85% inflation rate. The ideology underpinning the New Order emphasised political stability and economic development in contrast to political uncertainty and economic stagnation. This included the banning of all communist and leftist organizations, worker organizations (except for "company unions"), and the Indonesian Peasant Front; as well as the assertion of military control over all political life. In economic terms, macroeconomic stability, foreign investment, and trade were at the forefront (Manning, 1999).

In April 1999, the outgoing parliament passed a law that gives provinces a greater share of the revenues generated from resource wealth produced locally. But devolving revenues and decision-making to provincial and local authorities is no guarantee that corruption will be eliminated or that the funds will be used more efficiently in sectors such as health and education (Booth, 2000).

From the above mentioned, it is clear that, in particular, Bupati are interested in spreading palm oil plantations on their territory due to a higher tax collection for their self-government, and it is related to deforestation, large corrupt opportunities, and an unofficial economy related to illegal logging.

4. Corruption and the unofficial economy in Indonesia

Countries with tougher market entry controls have a higher level of corruption and a larger unofficial/gray economy (Djankov, 2010). S. Djankov (2010) also found that countries with less restrictive, less democratic and with more interference of governments regulate entry into the market more strictly, in some cases even managing the level of economic development. In less democratic countries, the entry is regulated more strictly, and such regulation does not produce visible social outcomes. Beneficiaries of these profits seem to be mainly politicians and officials themselves (Djankov, 2010).

In order to achieve comparable data within 190 economies, the World Bank has been targeting a 'Doing Business' survey focusing on a standardized firm that: has 100% domestic ownership, has an initial capital equivalent to ten times per capita income, performs general industrial or commercial activities, and employs between 10 to 50 people one month after the start of operation, all of them being domestic (World Bank, 2017). The research results show that Indonesia occupies the 91st place (World Bank, 2017).

This illicit appreciation underlines the possibility of the above-mentioned S. Djankov's theories and points out that the unofficial economy is more prevalent in Indonesia, including illegal deforestation, especially in the areas in charge of the corrupt Bupati.

5. Fighting with illegal deforestation in Indonesia

S. Djankov's thesis also supports the fact that Indonesian President Joko Widodo stopped the issue of new concessions on palm plantations and mineral extraction in 2016 on the grounds that rapid expansion of palm oil destroys rainforests and contributes to annual fire and smoke (Satriastanti, 2016). According to S. Djankov, such regulations may be related to the less democratic and more interfering government in governing

the level of economic development. However, the Indonesian President took this step officially, among other things, to protect the rainforests. Thus, this reason can be generally covered by the issue of environmental protection and combating climate change.

Most likely that not by chance, potentially related to this step, in October 2016, Joko Widodo negotiated that Indonesia became the first partner to the EU that was granted the right to issue FLEGT (EU Forest Governance, Law Enforcement and Trade) licensing of exporters from Indonesia to verify the legality of the origin of timber and timber products coming to the EU. In 2003, the EU Forestry Administration created an Action Plan to combat illegal logging. This milestone reflects the growing global perception of the Indonesian system seeking to ensure the legality of the origin of the wood. The Indonesian success has been made possible by strong coordination of Indonesian ministries led by President Joko Widod. By December 2016, a total of 13.6 million hectares of natural forest and 3,498 forest and industrial firms were certified. Since November 15, 2016, when Indonesia began issuing FLEGT licenses until December 31 of 2016, Indonesia issued 4 804 FLEGT licenses for exporting timber products to the EU, which is more than 800 licenses per week. This report covers the period from May 2015 to December 2016 (FLEGT report, 2016).

Based the above-mentioned analysis it can be concluded that Joko Widodo has made use of the contract with the EU, inter alia, for certifying forests, forestry and industrialists, thereby increasing control over the Bupati's activities in the areas of timber harvesting, mining and palm plantations. The President's ban on granting further licenses to palm plantations and the extraction of minerals is linked to this policy. However, as have been already mentioned, S. Djankov (2010) found that countries with less limited, less democratic and more interfering government even manage the level of economic development in some cases, and such regulation does not produce visible social outcomes. Beneficiaries of these profits seem to be mainly politicians and officials themselves (Djankov and others, 2002).

Because of President Joko Widod's current activities in this area, it is all about anticipating a rather increased rate of corruption and economy in local government. The prohibition of licensing is directed, among other things, to large palm-tree companies that cannot be expected to set up palm plantations and exploit "black" minerals under the influence of this regulation and lose the possibility of spreading their plantations under the supervision of local authorities. On the other hand, local government and their representatives gain virtually unlimited power over the land for potential plantations and mineral extraction and can organize palm plantations and mineral extraction on their own territory "on black". In this way, the owners of related plots will potentially be affected by the Presidential regime, on the grounds that their value has fallen because of non-licensing. These landowners will be more prone to deal with people and entities linked to local government and to promote the creation of palm plantations and mineral extraction without proper permits.

Above this work, there is a detailed analysis of the aforementioned policy of Joko Widoda and its possible contribution or possible losses for Indonesia. Therefore, this question can be recommended for further scientific research.

Conclusions

Deforestation in Indonesia is caused by uncontrolled decentralized corruption. The European Union is interested in this issue, given that the environment and the issue of global warming are one of the main factors of international interest. Indonesian biodiversity is threatened by massive deforestation as a result of the mass production of crude palm oil, which was previously questioned by the Engel Granger co-integration test, with three-time series, namely, Corruption Perceptions Index, deforestation rates and crude palm oil prices; however, a long-term relationship was not found. The author of this article shows that the value of CPI is not so important in clarifying this issue, but rather the nature of corruption in Indonesia. However, the value of CPI is still very high in Indonesia, and the nature of corruption is appropriate for illegal logging. Thus, international response is needed to reduce the level of deforestation in Indonesia. Under the pressure of the European Union, Indonesia has committed itself to pushing new rules into the largest rainforest in Asia. The FLEGT license entered into force on November 15, 2016. The EU strictly enforces these rules, a good step

against deforestation as a result of illegal logging in Indonesia. However, the related Indonesian President's order to ban new licenses for palm plantations and mining licenses is questionable as it can potentially increase corruption and the unofficial economy in Indonesia at the local level.

References

- Booth, A. (2000). The Indonesian Crisis of 1997/99 and the Way Out: What are the Lessons of History. *Economic Papers*, Vol. 19(2), p. 21–43.
- Collis, J., Hussey, R. (2003). *Business Research: A Practical Guide for Undergraduate and Postgraduate Students*. Basingstoke: Palgrave Macmillan.
- Djankov, S., La Porta, R., Lopez De, S., Shleifer, A. (2002). The Regulation of Entry Working Paper 7892. *National Bureau of Economic Research*. Available at: <http://www.nber.org/papers/w7892> [Accessed: 29 December 2017].
- Eldebe, O., Procházka, P., Maitah, M. (2015). Causes for Deforestation in Indonesia: Corruption and Palm Tree Plantation. *Asian Social Science*, Vol. 11(27), p. 120–124.
- FLEGT report. (2016). Available at: <http://www.fao.org/3/a-i6805e.pdf>
- Food and Agriculture Organization. (1990b). *Proposals for the Forest Sector Development in Indonesia* (UTF/INS/065/INS, Informal Discussion Document). Jakarta, Indonesia: Government of Indonesia.
- Forrest, W. (2011). Solving Indonesia's Infrastructure Dilemma. *The Jakarta Globe*. Available at: <http://jakartaglobe.id/archive/solving-indonesias-infrastructure-dilemma/> [Accessed: April 16, 2017].
- Frič, P. a kol. (1999). *Korupce na český způsob*. Praha: G plus G. ISBN 80-86103-26-9.
- Glaser, B. G., Strauss, A. (1967). Discovery of Grounded Theory. *Strategies for Qualitative Research*. Sociology Press.
- Hansen, J. K. (2004). *Rene hænder i Rusland. En analyse af udenlandske firmaer på fremmede markeder præget af korruption med danske firmaer i Rusland som case, speciale*. København: Institut for Statskundskab, Københavns Universitet.
- Johnson, T. Palm Oil Companies Exploit Indonesia's People – and its Corrupt Political Machina. *The Guardian*. Available at: https://www.transparency.org/news/feature/keeping_forests_clean_and_green [Accessed: December 29, 2017].
- Lambsdorff, J. G. (2007). *The Institutional Economics of Corruption and Reform Theory, Evidence and Policy*. Cambridge: University of Cambridge. ISBN: 9780521872751.
- Lambsdorff, J. G. (2004). Between Two Evils – Investors Prefer Grand Corruption! *Diskussionsbeitrag*, Nr. V-31-05. Volkswirtschaftliche Reihe. ISSN 1435-3520.
- Lee, S. Oh., Eden, L. (2010). Why Do Firms Bribe? *Management International Review*.
- Manning, Ch. (1999). Labour Institutions: The Case of Indonesia. In C. Barlow (Ed.). *Institutions and economic change in Southeast Asia: The context of development from the 1960s to the 1990s*, p. 42–54. Cheltenham, United Kingdom: Edward Elgar.
- Molnár, Z. (2012). *Pokročilé metody vědecké práce*. Zeleneč: Profess Consulting, Věda pro praxi (Profess Consulting), p. 170. ISBN 978-80-7259-064-3.
- Muller, K., Laboutková, Š., Vymětal, P. (2010). *Lobbing v moderních demokraciích*. Praha: Grada Publishing, a. s., s. 256. ISBN 978-80-247-3165-0.
- Usuagwu, L. (2010). Conceptualization of Corruption in Business Organizations. *International Business & Economics Reasersch Journal*, Vol. 9, No. 2. ISSN 2157-9393.
- Pachmann, A. (2006). *Korupce v České republice*. Praha: Veřejná správa. ISSN 1213-6581.
- Pachmann, A. (2009). Indonéska samospráva má zájem o energetickou soběstačnost. *Moderní obec*. ISSN 1211-0507.
- Rose-Ackerman, S. (1999). *Corruption and Government: Causes, Consequences, and Reform*. Cambridge University Press. ISBN 05-216-5912-4.
- Satriastanti, E. (2016). Jokowi Bans New Oil Palm and Mining Concessions. *Mongabay*. Available at: <http://jakartaglobe.id/archive/solving-indonesias-infrastructure-dilemma/> [Accessed: December 29, 2017].
- Shleifer, A., Vishny, R. W. (1993). Corruption. *Quarterly Journal of Economics*, Vol. CVIII, p. 599–617. ISSN 1531-4650.
- Transparency International. (2011). Keeping Forests Clean and Green. *Transparency International*. Available at: https://www.transparency.org/news/feature/keeping_forests_clean_and_green [Accessed: December 29, 2017].
- Vymětal, P. (2006). Typologie korupce. In V. Šimíček, B. Dančák, V. Hloušek. *Korupce. Projevy a potírání v České republice a Evropské unii*. Mezinárodní politologický ústav Masarykovy univerzity. ISBN 80-210-4062-9.
- Wei, S. J. (2000). How Taxing is Corruption on International Investors? *Review of Economics and Statistics*, Vol. 82.
- Vpa Joint Implementation Committe. (2016). Annual report May 2015 – Dec 2016. Implementation of the Indonesia-EU FLEGT Voluntary Partnership Agreement. Available at: http://www.euflegt.efi.int/documents/10180/432038/Indonesia_annual_report_2015-16_web_low.pdf/16c4e537-c399-0cde-cbdf-1f5996833a9f [Accessed: December 29, 2017].

World Bank. (2018). *Doing Business 2018*. Available at: <http://www.doingbusiness.org/~media/wbg/doingbusiness/documents/profiles/country/idn> [Accessed: December 29, 2017].

World Bank. (2017). *Doing Business 2017*. Available at: <http://www.doingbusiness.org/~media/WBG/DoingBusiness/Documents/Annual-Reports/English/DB17-Report.pdf> [Accessed: December 29, 2017].

World Bank. (2017). *Doing Business 2017 – starting a business 2017*. Available at: <http://www.doingbusiness.org/data/exploretopics/starting-a-business> [Accessed: December 29, 2017].

KORUPCIJA IR MIŠKŲ NAIKINIMAS INDONEZIJOJE

ALES PACHMANN

AMBIS (Čekijos Respublika)

Santrauka

Šiame straipsnyje įvertinamas korupcijos poveikis miškų kirtimui Indonezijoje. Aplinkos ir globalaus klimato atšilimo klausimai yra viena pagrindinių tarptautinių problemų. Indonezijos biologinei įvairovei kyla didelis pavojus – miškų naikinimas. Šiuo klausimu atliktas tyrimas. Aiškintasi, ar miškų nykimą Indonezijoje lėmė korupcija, ar tai remia palmių aliejaus gamybos magnatai. Tyrimas atliktas taikant Engelio Grangerio kointegracijos testą. Įvertinti prieš tai atliktų tyrimų duomenys, korupcijos suvokimo indeksas (KSI), miškų naikinimo rodiklis ir neapdoroto palmių aliejaus kaina. Korupcijos indeksas Indonezijoje vis dar labai didelis, tai sudaro sąlygas neteisėtai medienos ruošai, kartu ir miškų naikinimui Indonezijoje. Remdamasi naujuoju ES įstatymu, kuriame reikalaujama medienos gaminius įsigyti teisėtai, Indonezija įsipareigojo laikytis naujų taisyklių, nustatytų atogrąžų miškams. Pavyzdžiui, FLEGT (Miškų teisės aktų vykdymas, valdymas ir prekyba) licencijavimas pradėtas 2016 metų lapkričio mėnesį. ES griežtai laikosi šių taisyklių ir tai padeda kovojant su miškų naikinimu ir neteisėta medienos ruoša Indonezijoje. Tačiau, kadangi šalyje korupcijos apraiškos didžiulės, tai gali lemti dar didesnę korupcijos bangą vietiniu lygmeniu. Korupcijos lygis Indonezijoje nėra svarbiausias klausimas, pagrindinė problema – korupcijos prigimtis.

PAGRINDINIAI ŽODŽIAI: *korupcija, FLEGT licencijavimas, miškų naikinimas, tarptautiniai santykiai.*

JEL KLASIFIKACIJA: D73, Q2, Q5,