
Blood diamonds: an analysis of the state of affairs and the effectiveness of the Kimberley Process

Meike Schulte*

Middlesex University Dubai,
Dubai, United Arab Emirates
Email: mnschulte@hotmail.com
*Corresponding author

Cody Morris Paris

Middlesex University Dubai
Dubai, United Arab Emirates
Email: C.paris@mdx.ac.ae
and
University of Johannesburg,
Johannesburg, South Africa

Abstract: In an era when corporate responsibility and sustainability are gaining momentum, and growing access to information and communication has empowered consumers to make more socially responsible purchasing decisions, the diamond industry remains opaque. The Kimberley Process was established to monitor the rough diamond trade with the objective of stemming the flow of conflict diamonds. The definition of conflict diamonds, however, often excludes human rights abuses, which has led to mounting criticism. The purpose of this paper is to examine the prevalence, magnitude, and scope of ethical issues affecting sourcing conditions in the diamond industry. The research found that ethical issues were reported in the diamond industries of several African nations, with Angola topping the list. Child labour and slavery are the most prevalent human rights abuses. In 2017, one in five diamonds in terms of volume and one in ten diamonds in terms of value may have been produced under conditions that cannot be regarded as sustainable or ethical.

Keywords: diamond industry; conflict diamonds; blood diamonds; human rights; Kimberley Process; ethical sourcing; sourcing conditions; civil war; resource curse; sustainability; transparency.

Reference to this paper should be made as follows: Schulte, M. and Paris, C.M. (2020) 'Blood diamonds: an analysis of the state of affairs and the effectiveness of the Kimberley Process', *Int. J. Sustainable Society*, Vol. 12, No. 1, pp.51–75.

Biographical notes: Meike Schulte completed her Masters of Business Administration with Distinction at Middlesex University Dubai. Her research focused on supply chain transparency and ethical consumerism. She is a graduate diamond grader and has a professional background in the diamond industry. She further is a published author and is currently enrolled as a Doctor of Business Administration student at the Swiss Business School.

Cody Morris Paris is the Deputy Director of Academic Planning and Research at the Middlesex University Dubai, and an Associate Professor in the School of Law and the Business School. He is a Senior Research Fellow in the University of Johannesburg. He received his PhD in Community Resource Development, a MSc in Tourism Studies and a BIS in International Geography and Political Science with minors in Cultural Anthropology and Tourism from the Arizona State University, USA. He is a social scientist with varied research and teaching interests within the areas of: tourism, international politics, community development, sustainable development, technology, global security, and experiential learning.

This paper is a revised and expanded version of a paper entitled ‘An empirical study of supply chain transparency and ethical consumerism in the diamond industry through a paradigm-based approach’ presented at MDX Student, Research Symposium, part of the ERPBSS Conference ongoing program, Dubai, UAE, 18 November 2018.

1 Introduction

The global rough diamond production in 2017 amounted to 150 million carats, valued at USD 15.9 billion (Kimberlyprocessstatistics.org, n.d.), and global diamond jewellery sales were \$82 billion in 2017 (Debeersgroup.com, 2018). Diamonds are commercially mined in 23 countries. The mining industry is characterised by an oligopoly, where 70% of the market is occupied by five players: ALROSA, De Beers, Rio Tinto, Dominion Diamonds and Petra Diamonds (Linde et al., 2017). Diamond trade primarily takes place in six diamond hubs: Antwerp, Mumbai, Dubai, Hong Kong, New York and Tel Aviv (Spektorov et al., 2013). The primary drivers of the global demand for diamonds are the USA and China (Linde et al., 2017).

As some diamond consumers, like all consumers, become more ethically driven in their purchasing decisions (Kuepfer and Papula, 2010), spurred on by access to information and communication technologies and media spotlight on unethical practices associated with ‘conflict’ diamonds and the negative environmental impact of mining, the importance of sustainable and transparent business practices are becoming increasingly important (Grant, 2016; Chopra and Meindl, 2016; Hoffman and Ehrenfeld, 2015; Shaw et al., 2018; Abdo and Paris, 2017). As a result, some miners are exploring opportunities to decrease their environmental impact, whereas downstream. These trends have resulted in supportive legislation in some countries, such as the Clean Diamond Trade Act (Bush, 2003), Dodd-Frank Wall Street Reform and Consumer Protection Act (2010), and the EU Conflict Minerals Regulation (European Commission, 2016). However, amidst the trend of industries embracing supply chain transparency (Zhu et al., 2017; Carter and Rogers, 2008), the diamond industry appears to lag behind as it remains opaque (Spektorov et al., 2013).

The Kimberley Process (KP) was created to monitor the rough diamond trade with the objective of stemming the flow of conflict diamonds. Through the chain of custody, rough diamond parcels are traced until the point where they are cut and polished and

cease to be rough diamonds. The KP applies a strict interpretation of their definition of conflict diamonds, which excludes human rights. Amidst growing concerns about human rights violations in sourcing countries, its restrictive scope has led to mounting criticism and calls for reform (Winetroub, 2013; Human Rights Watch, 2016; Howard, 2015; Diamonds.net, 2017; Global Witness, 2013).

The research problem at the heart of this paper is to examine the prevalence, magnitude, and scope of ethical issues affecting sourcing conditions in the diamond supply chain. Insights into the problem are derived through the following four objectives:

- 1 To explore the nature of ethical violations and to determine which sourcing countries are affected.
- 2 To examine the prevalence of ethical violations since the establishment of the KP.
- 3 To explore the proportional impact of unethically sourced diamonds on the global market.
- 4 To corroborate the legitimacy of the concerns posed by the civil society and industry members.

2 Conflict diamonds

The issue of conflict diamonds gained international attention in the 1990s due to ongoing conflicts and civil wars that took place in several diamond sourcing countries. In 1996, 14 African nations were affected by armed conflict, which resulted in over 50% of all war-related casualties and produced over eight million refugees (UN Secretary-General, 1998). By 2003, diamond-funded conflicts resulted in the deaths of 3.7 million people (Koyame, 2005; Fischman, 2014). The most notable of these conflicts were in Angola, Liberia, Sierra Leone and the Democratic Republic of Congo (DRC) (Koyame, 2005; Nichols, 2012; Winetroub, 2013; Fischman, 2014; Howard, 2015). Some scholars claim that a resource curse helped create an environment where the extraction of diamonds could be utilised as a means to fund conflict. A 'resource curse' affects nations with abundant natural resources, like diamonds, but is unable to effectively capitalise on these resources to battle poverty and increase overall development and well-being. Countries affected by the 'resource curse' are characterised by authoritarian regimes, poor economic growth, corruption, and internal conflict, leading to the unequal distribution of wealth and poverty (Wexler, 2011; Nichols, 2012; Winetroub, 2013; Howard, 2015).

In the case of diamonds, accessibility determines the extent to which the diamonds can be 'looted' and used to fund conflict and other negative impacts (Snyder and Bhavnani, 2005). Alluvial diamonds are found in or near rivers, lakes, dried-up waterbeds, and marine deposits. Unlike primary deposits, where diamonds are located in the kimberlite or lamproite rock that transported them to the surface of the earth and then settled back deep into the pipes, secondary 'alluvial' deposits consist of diamonds that are located above the ground and are removed from the primary source, due to the erosion of the pipe that carried the deposit to the surface. Primary deposits require open-pit and underground mining as a means of extraction, whereas alluvial diamonds, excluding marine deposits that require sophisticated technology, can generally be recovered with

simple tools (GIA, 2009). Prominent alluvial diamond deposits are found in the countries most associated with the link between civil war and conflict diamonds: Angola, Sierra Leone, and the DRC (Alluvial Diamond Mining Fact Sheet, n.d.).

Angola's independence from Portugal in 1975 was followed by civil war, as the National Union for Total Independence of Angola (UNITA), backed by the USA, and the Popular Movement for the Liberation of Angola (MPLA), supported by the Soviet Union, fought for governing power (Nichols, 2012; Howard, 2015). After the Lusaka Protocol was signed in 1994, the United Nations (UN) peace-keepers entered the country (Lusaka Protocol, 1994), which did not deter UNITA's control over the diamond deposits. It continued to generate \$4 billion in diamond revenues to fund its activities, including the procurement of arms (Hummel, 2007). The UN Security Council imposed diamond sanctions in 1998, which were lifted in 2002 (Global Witness, 2006). During the civil war, half a million people lost their lives, while 3.5 million people were displaced (Holmes, 2007).

In 1989, Charles Taylor, leader of the Libyan backed National Patriotic Front of Liberia, sought to end the regime of President Samuel Doe. However, a rival rebel leader, Prince Yormie Johnson, beat him to the punch. The rivalry between the two sparked a civil war that officially ended in 1997 (Left, 2003). The conflict is believed to have been an ignitor to the Sierra Leonean civil war, as Taylor provided training and weapons to the Revolutionary United Front (RUF) in exchange for diamonds (Howard, 2015). The UN imposed sanctions in 2001, which were reapplied on an annual basis (Global Witness, 2006). The violence in Liberia cost 200,000 Liberians their lives, as 1.5 million people were displaced (Left, 2003). During Sierra Leone's civil war from 1991 to 2002, the RUF gained control over the country's diamond fields, of which the proceeds were used to fund conflict in a bid to overthrow the government (Nichols, 2012; Howard, 2015). The atrocities committed by the RUF infamously included amputations and the recruitment of child soldiers, which eventually was brought to the world's attention (Human Rights Watch, 2000). In 2002, The UN Security Council sanctioned Sierra Leone's diamond trade (UN News, 2002). Between 50,000 and 75,000 people perished during the civil war and between 1.5 and 2.25 million people were displaced (Holmes, 2007).

After its independence from Belgium in 1960, the DRC witnessed numerous power struggles. Following the end of the reign of Joseph Mobutu in 1997, Laurent-Désiré Kabila succeeded his position. Kabila initiated an agreement with Rwanda and Uganda to exploit the DRC's resources, in which diamonds played a significant role. However, by 1998, both strategic partners used diamond funds to arm the Congolese Democratic Rally in a bid to overthrow Kabila. This coup attempt ignited a civil war that involved seven African nations (Fischman, 2014). An estimated 2.5 million people were killed between 1998 and 2001 (Hardcastle, 2001). However, UN sanctions were not imposed (Global Witness, 2006).

In the absence of support of the international community and the diamond trade, the countries that were subject to UN Security Council sanctions, failed to comply, which was brought to light in 1998 by an investigation of Global Witness (Wallis, 2005). The non-governmental organisation (NGO) has the objective to expose human rights violations and environmental exploitation. In 1999, the NGO Partnership Africa Canada (PAC) exposed how diamonds were used in Sierra Leone to finance conflict (Koyame, 2005). Their research revealed the scale and consequences of the problem and demonstrated the noncompliance with the punitive measures imposed on the offenders.

3 The KP

The exposure of conflict diamonds by PAC and the 1999 ‘Fatal Transaction’ awareness campaign by Global Witness resulted in the first KP meeting in 2000 to discuss certificates of origin. Both NGOs were instrumental in the inception of the KP. The Kimberley Process Certification Scheme (KPCS) was established in 2003, driven by a shared belief that “urgent international action is imperative to prevent the problem of conflict diamonds from negatively affecting the trade in legitimate diamonds, which makes a critical contribution to the economies of many of the producing, processing, exporting, and importing states, especially developing states” (Kimberleyprocess.com, n.d.; Winetroub, 2013).

The KP is a tripartite organisation consisting of governments, the industry, and civil society. Whereas the industry and governments have a commercial interest in the trade, the role of the civil society is an observatory one. The organisation has the mission to eliminate the trade in conflict diamonds in a bid to regulate the diamond industry. To achieve its objectives, it implemented a certification scheme focussed on import and export. Governments of the KP member countries are required to certify the origin of the rough diamonds and enforce controls aimed at preventing conflict diamonds from entering the supply chain (Kimberleyprocess.com, n.d.; Nichols, 2012; Bruffaerts, 2015; Howard, 2015; Rush and Rozell, 2017). Participants are required to establish national institutions, legislation, and import/export controls. Members are to release statistical data and commit to transparent practices. They are allowed to trade with only other KP participants, and all shipments are to be certified as conflict-free, provided with supporting documentation (Kimberleyprocess.com, n.d.). The System of Warranties is the voluntary auditing mechanism that involves integrating a statement on invoices that declares the diamonds as conflict-free (Winetroub, 2013).

The establishment of the KP sought to provide the industry with a set of universally accepted solutions, regulations, processes, and systems to solve the problems posed by the notion of conflict diamonds. A strict definition of conflict diamonds was implemented: “Rough diamonds used by rebel movements or their allies to finance conflict aimed at undermining legitimate governments.” The KP’s efforts have resulted in 99.8% of the rough diamonds trade to be certified as conflict-free (Kimberleyprocess.com, n.d.). However, weaknesses in the design of the framework started to become apparent.

The KP has a loophole for corrupt governments. As the definition of conflict diamonds specifically targets rebel movements (Kimberleyprocess.com, n.d.; Nichols, 2012), legitimate governments committing similar acts comply with the criteria and thus undeterred from trading rough diamonds. In 2006, a large diamond field was discovered in Marange, Zimbabwe (Howard, 2015). The alluvial nature of the deposit made the extraction easily accessible and cost-efficient (Wexler, 2011). Following an influx of illegal miners, President Mugabe’s party the Zimbabwean African National Union-Patriotic Front (ZANU-PF), took over control, killing 200 miners. In the following years reports of rampant corruption, rape, illegal trade, human rights abuse and a torture camp (State.gov, n.d.; Human Rights Watch, 2009; Andersson, 2011; Nichols, 2012; Winetroub, 2013; Howard, 2015; Bruffaerts, 2015) surfaced, painting a dire picture of what can happen when a corrupt government uses diamonds to maintain control (Rush and Rozell, 2017). Zimbabwe’s diamond deposit is the largest in the world (Zimmisky,

2014), but failed to benefit local communities, as Mugabe faces prison over the embezzlement of \$15 billion in diamond revenues (Voa, 2018). Similarly, in Angola, Marques' (2015) research exposed rampant corruption of the Angolan government linked to the diamond trade, which subsequently led to his incarceration. He was eventually released under international pressure (Miller, 2015).

Reports of systematic human rights violations linked to the diamond industry of sourcing countries have been abundant (State.gov, n.d.; Human Rights Watch, 2010; Smillie, 2013; Howard, 2015; Diamonds.net, 2017; Global Witness, 2013; Nichols, 2012; Bruffaerts, 2015; Rush and Rozell, 2017; Winetroub, 2013). Nevertheless, the KP has been successful in its objective of stemming the flow of diamonds used to finance conflict (Howard, 2015; Winetroub, 2013). The definition of conflict diamonds is vital to the significance of the KP as it stipulates the scope of its objectives. However, the definition, on which its institutional architecture rests, is widely regarded as exceedingly restrictive, as it applies only to rough diamonds, rebel movements and fails to include wider abuses of human rights. With the emergence of new challenges, it has been widely argued that the definition ought to be expanded (Nichols, 2012; Smillie, 2013; Bruffaerts, 2015; Rush and Rozell, 2017; Howard, 2015; Winetroub, 2013; Human Rights Watch, 2016; Wallis, 2005; Gooch, 2008). Following growing calls for reform (Winetroub, 2013; Smillie, 2013) alternative definitions have been emerged (Table 1). The ongoing discussion underlines that human rights are the key issue that continues to evoke criticism.

Table 1 Definitions of conflict diamonds

<i>Definition conflict diamonds</i>		
Kimberley Process	"Rough diamonds used by rebel movements or their allies to finance conflict aimed at undermining legitimate governments." (Derived from United Nations General Assembly Resolution 55/56.47)	Kimberleyprocess.com
United Nations	"Diamonds that originate from areas controlled by forces or factions opposed to legitimate and internationally recognized governments, and are used to fund military action in opposition to those governments, or in contravention of the decisions of the security council."	Rush and Rozell (2017)
Global Witness	"Diamonds that are used to fuel violent conflict and human rights abuses."	Rush and Rozell (2017) and Winetroub (2013)
Nigel Davidson	"Rough diamonds, the production of which is associated with, or the sale of which finances, the commission of international crimes, including war crimes, genocide and crimes against humanity."	Davidson (2016)
Jena Martin and Karen Bravo	"Any diamonds whose mining, procurement and trading result in the gross violations of fundamental human rights, this notwithstanding the origin and who is in control of the process."	Martin and Bravo (2015)
Rafael Marques and Rui Falcão de Campos	"All those diamonds that come from areas where diamond mining is based on the systematic violation of human right" (Proposed to be included in the current definition)	Marques and de Campos (2005) and Nichols (2012)

Table 1 Definitions of conflict diamonds (continued)

<i>Interchangeable definition conflict/ blood diamonds</i>		
Foreign Policy	"Conflict diamonds, also known as 'blood diamonds,' are rough stones mined at gunpoint by slaves and prisoners for the enrichment of those holding the weapons."	Campbell (2009)
Rapaport Fairtrade	"Conflict or blood diamond: a diamond which comes from a mine located in or providing profits to any of the following: civil conflict; an illegitimate rebel movement; an oppressive regime; or a violation of the Rapaport Minimum Human Rights Standard. A conflict diamond is also a diamond which is mined, cut or polished under harmful or unjust labour conditions."	Rapaportfairtrade.com (n.d.)
<i>Definition blood diamonds</i>		
Martin Rapaport	"Diamonds involved in murder, mutilation, rape or forced servitude."	Nichols (2012)
Rafael Marques	"Diamonds mined in areas where local communities are subject to a regime of corruption, violence, arbitrariness and impunity."	Marques (2015)
Government of Australia	"Diamonds from mines where human rights abuses occur." (Note: Australia failed to expand the definition in accordance, during its tenure as KP Chair in 2017)	Dunn (2013)

The KP Preamble only mentions human rights once, in relation to conflict and although the document includes a list of definitions, no definition of human rights is provided (Kimberleyprocess.com, 2013). The KP was established on the recommendation of and in compliance with the United Nations Resolution 55/56 (Undocs.org, 2001). This followed the Fowler (2000) Report, which details the violence caused by UNITA in Angola and the significance of diamonds in the equation. The United Nations Resolution 55/56 addresses the concern about the role conflict diamonds play in funding conflict and the impact this has on the peace and security of the people affected (Undocs.org, 2001). Although the KP does not define human rights, the UNs define it as rights that everybody is entitled to and are inherent to all, regardless one's religion, race, language, sex, ethnicity, nationality or any other aspect. Human rights pertain to the freedom of opinion, freedom from torture and slavery, the right to education and work, the right to live in liberty and more, without discrimination (UN.org, 1948, n.d.).

Due to the narrow definition of conflict diamonds and the concerns arising as a result, the third pillar of the KP, occupied by the civil society, is rapidly eroding. In 2009, Ian Smillie, who had been closely involved in the inception of the KPCS, decided to leave the KP and PAC because of the refusal to deal with human rights issues (Even-Zohar, 2009). Global Witness left the KP in 2011 (Nichols, 2012; Howard, 2015), stating that the unwillingness to address the relation between diamonds and violence had rendered it outdated (Global Witness, 2011; Rush and Rozell, 2017). In 2017, PAC, now known as IMPACT, announced its departure from the KP, citing the false confidence the KP provides buyers. Global Witness and IMPACT were founding partners of the KP (Winetroub, 2013), both nominated for the Nobel Peace Prize in 2003 for their work on

conflict diamonds (Koyame, 2005; Sanderson, 2018). The departure of NGOs diminishes the observatory element aimed at maintaining accountability.

The KP is also facing increased opposition from the industry. One of the most vocal and influential industry members is Rapaport (Nichols, 2012; Nicholson, 2017; Bates, 2017), founded by Martin Rapaport, which facilitates the trade in rough and polished diamonds through auctions and its online diamond exchange. Rapaport's influence in the industry stems from the weekly publication of the Rapaport Price List, which has dictated polished diamond prices since 1978 (Richman, 2017). Rapaport claims that the KP legalises and legitimises blood diamonds (Rapaport, 2010b; Southward, 2013). Following the atrocities in Zimbabwe and the KP's failure to suspend the nation, Rapaport banned the trade of Marange diamonds on its portal and vowed to expel and publish the names of members who continued to trade in these goods (Rapaport, 2010a). This action was followed by a hunger strike (Friedman, 2010) and his resignation from the World Diamond Council (Nichols, 2012; Business-standard.com, 2013). Cartier and Tiffany & Co. joined the effort by publicly boycotting diamonds from Zimbabwe (Human Rights Watch, 2010). The industry opposition exposes fractures in the KP process.

The 2006 film *'Blood Diamond'*, starring Leonardo DiCaprio, magnified the public awareness of the atrocities during the Sierra Leonean civil war and presented conflict diamonds to the world. Although the matter was published in the news at the time, repackaging the concept as 'entertainment' reached a far broader audience (Gooch, 2008; Nichols, 2012; Howard, 2015; Rush and Rozell, 2017; Sharma, 2012), including current and future generations of diamond consumers. The resulting impact was the inclusion of the term 'blood diamonds' in the vocabulary of the masses.

The calls for the KP to reform to include human rights into their definition were met with resistance. Some argued that the inclusion of human rights exceeded the scope of the KP. This resistance is illustrated by the President of the World Federation of Diamond Bourses, who argued that the KPCS is successful in reaching its objective and that human rights exceed the scope of the KP and the diamond industry (Melik, 2010; Howard, 2015). This sentiment is echoed by several KP members, including South Africa, Namibia, India, China, and Russia, which vetoed the inclusion of human rights in the definition (Bruffaerts, 2015). Others dismissed the reports of human rights by NGOs as sensationalism aimed at generating donations.

The KP has realised important achievements in stemming the trade of conflict diamonds (Wallis, 2005; Winetroub, 2013; Howard, 2015). However, critics argue that the KP creates the deceptive view that diamonds are 'clean' (Gooch, 2008; Nichols, 2012; Fischman, 2014; Human Rights Watch, 2016), whereas others take it a step further and claim that the KP functions as a façade of legitimacy (Hilson and Clifford, 2010; Rapaport, 2010b; Mining Engineering, 2012; Emtairah and Mont, 2010). Some structural design flaws and limitations of the KP have come to light. These include self-governance, the lack of an administrative centre, the absence of a budget and an inadequate monitoring system, which is voluntary and self-financed (Wallis, 2005; Smillie, 2013; Fischman, 2014; Howard, 2015). The KP requires unanimous consensus in its decision-making process, which can impede reforms (Smillie, 2013; Winetroub, 2013; Global Witness, 2013; Bruffaerts, 2015; Human Rights Watch, 2016; Rush and Rozell, 2017). The KP does not prevent smuggling and fails to effectively address non-compliance (Gooch, 2008; Smillie, 2013; Nichols, 2012; Rush and Rozell, 2017). The KP is neither subject to international law nor uniform enforcement mechanisms (Winetroub, 2013; Fischman, 2014; Howard, 2015). The system of warranties, which is a declaration on the

seller's invoice, stated that the diamonds are conflict-free, is not required for retailers (Wallis, 2005). A further concern is the relative ease with which KPCS certificates can be forged (Howard, 2015; Gooch, 2008; Quénivet, 2010; FATF, 2013; Fischman, 2014; Howard, 2015). The Antwerp World Diamond Centre issued warnings about forged KP certificates in 2015 (Brummer, 2015) and 2016 (The Diamond Loupe, 2016).

4 Methodology

In this study, an ethical timeline test was employed to compare the KP production statistics (Kimberleyprocessstatistics.org, n.d.) to the Human Rights Reports from the US Department of State, which links ethical violations directly and explicitly to the countries' diamond industry (State.gov, n.d.). The rationale behind this method was to explore the nature, prevalence, and location of ethical issues. The KP as the entity tasked with the issue of conflict diamonds is central to this study; *ergo*, its statistics are crucial to inform any findings. The Human Rights Reports are based on the internationally recognised rights under the Universal Declaration of Human Rights (State.gov, n.d.; Un.org, 1948) and produced by a reputable source. Under the denominator of 'ethical issues', the authors distinguish human rights abuses and environmental issues, both of which are included in the Human Rights Report by the US Department of State. Non-sourcing KP members are excluded from the research. The KP started to publish data in 2004 and therefore, for both sources, the data spanning the period of 2004 to 2017 were analysed.

The analysis is loosely guided by the triple bottom line (Tyrrell et al., 2012), a concept consistent with wider sustainable development thinking, as it "provides a comprehensive approach to sustainable development and environmental protection" [Elkington, (2004), p.16], can lead to the embracement of the ideals of sustainable development. In this study, the economic dimension is represented by of the diamond production, both in terms of value and carat volume. The social dimension of this research focuses on human rights and further includes environmental issues. Combined, the latter two dimensions aggregately represent the wider the ethical concerns that the study aims to explore. The UNs state that environmental and human rights are closely and inherently related, as fundamental human rights cannot be realised when the health of the environment is compromised (UN Environment, n.d.; Ohchr.org, n.d.). The 1972 Declaration of the United Nations Conference on the Human Environment included the right to a healthy environment in the rights of men (Hrlibrary.umn.edu, 1972). Research reveals that 147 UNs members have incorporated and enforced the right to a healthy environment as a constitutional right (Boyd, 2012). The interdependent relationship between environmental and human rights explains why environmental issues are included in the Human Rights reports by the US Department of State, and why these issues in turn are included in the scope of the ethical concerns in this study.

Once the legitimacy of the ethical concerns is established, the diamond production volumes and values for sourcing countries where ethical violations occurred are expressed as a percentage of the global annual production to examine the magnitude and explore emergent trends. The annual production volume is expressed in carats, where one metric carat equals 0.200 grams (GIA, 2009). The annual production value is expressed as the average price (in USD) per carat multiplied by the annual production volume.

Diamonds of higher quality, and therefore a higher value, are more likely to be used in jewellery. However, this measurement has limitations, as operational costs are also included in the value. Operational costs are affected by factors like the type of mine, environmental conditions and the accessibility of the diamondiferous deposit. Underground mining, for example, is significantly more capital intensive than alluvial mining (GIA, 2009). To offset these limitations, the production volume has also been evaluated, as greater volumes indicate a greater impact on the global market.

It should be noted that the occurrence of reported ethical violations does not necessarily mean that these occurrences take place in all diamond mines of the sourcing country at any given time. However, given the serious nature of human rights violations, the fact that they do occur is unacceptable. When human rights abuses repeatedly occur over several years, this indicates a climate where violations are systematic. It further is not uncommon, particularly in African nations, for governments to have a stake in diamond mines (Zimmisky, 2018).

5 Findings

The ethical timeline test (Figure 1) reveals that ethical violations, consisting of human rights abuses and environmental issues, occurred in nine sourcing countries. The countries where ethical violations were reported during the research period were exclusively located in Africa. The highest variety of ethical issues was found in Zimbabwe's and Angola's diamond industry. Slavery was most consistently reported in Guinea, followed by Sierra Leone. Child labour was reported for all years in Sierra Leone and all but one in the Central African Republic and Liberia. Human rights violations and corruption were most prevalent in Angola, followed by Zimbabwe. Wage violations most frequently occurred in the Central African Republic, followed by Guinea and Sierra Leone. Illegal trade was most prevalent in the Central African Republic. Although the KP production for the Ivory Coast was zero until 2014, due to its suspension from 2009 to 2013, the Human Rights Reports linked ethical violations to the Ivorian diamond industry, before and during its suspension, indicating illegal mining and trade. Killings, rape and limited freedom of movement were most frequently reported in Angola. Botswana was the only country where environmental issues were reported, and reports of displacement of local communities with an absence of relocation fees were reported only in Zimbabwe. With 64 counts of reported incidents over the research period from 2004 to 2017, ethical issues were most prevalent in Angola, followed by Sierra Leone with 44 counts.

A noteworthy point is the KP's selection of its Chairs. Every year, a different member chairs the KP, while its successor acts as the Vice Chair. In 2011, the DRC had the honour of chairing the KP. This year, and in preceding years, there were reports of corruption and child labour in the diamond industry (State.gov, n.d.), while armed groups threatened the stability of the country (Human Rights Watch, 2011). Similarly, Angola chaired the KP in 2015 amidst reports of forced labour (State.gov, n.d.) and the incarnation of an author who exposed human rights violations and corruption in its diamond industry (Miller, 2015), who was eventually released due to international pressure. The selection of KP Chairs with reported ethical concerns in their diamond industries does not positively reflect on the reputation of the KP and raises questions about its integrity.

Figure 1 Ethical timeline (continued) (see online version for colours)

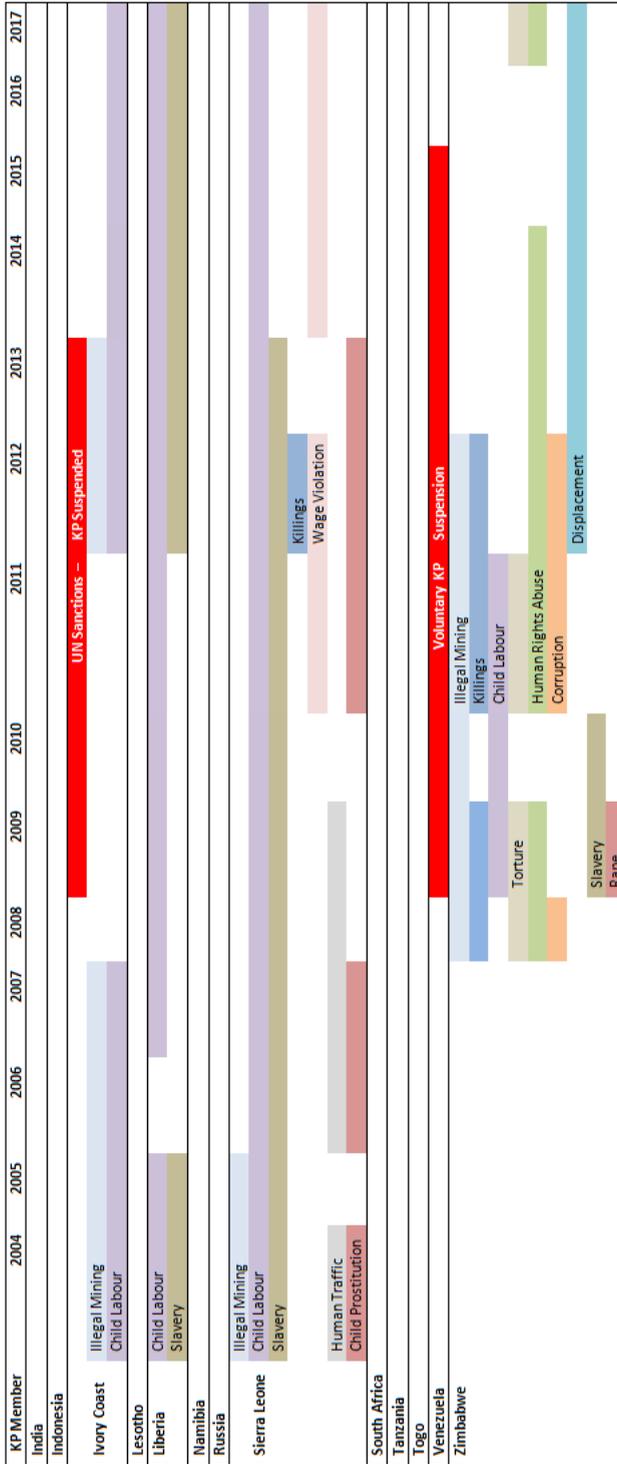


Table 2 Number of countries with reports of ethical issues in the diamond trade

<i>Number of countries with reports of ethical issues in the diamond trade</i>															
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Total
Rape	1	1				2	1	1	1	1	1	1	1		11
Funding conflict							1								1
Killing(s)	2	2	1	1	2	1	2	1	4	1			1		17
Limited freedom			1	1	1	1		1	1	1	1		1	1	10
Human rights	2	1	1	1	2	3	2	2	3	2	2	2	1	1	25
Corruption			1	1	1	1	1	3	1	1	1				10
Slavery	3	2	2	3	2	3	3	4	4	4	3	3	3	3	42
Environmental					1	1	1	1	1	1	1	1	1		9
Child labour	4	3	4	6	5	6	5	6	5	4	5	5	6	6	70
Wage violation							2	2	3	1	2	1	3	2	16
Illegal trade/mining	3	2	3	2	2	2	3	3	3				1	1	25
Torture			1	1	1	1		1	1					1	6
Human trafficking	1		2	2	2	2	1	1	1	1					13
Child prostitution	1		1	3					1	1					7
Displacement									1	1	1	1	1	1	6
Total	17	11	16	20	19	22	22	26	30	19	17	14	19	16	268

Note: Occurrences of ethical issues during KP suspension have been omitted.

Source: State.gov (n.d.)

The KP fulfils its mission of combatting the trade in conflict diamonds when the definition is strictly applied. Civil war broke out in the Central African Republic in December 2012 and was subsequently suspended by the KP in May 2013 (Kimberleyprocessstatistics.org, n.d.). Even though legal channels were obstructed by the KP, diamonds continued to be used to fund conflict (Flynn, 2014; Southward et al., 2014), indicating that the KP has limitations. The issues reported met the criteria for blood diamonds as defined by several sources (Table 1). Table 2 illustrates the nature of the incidents and in how many countries they occurred. It was found that the most prevalent issues during the research period were child labour (26%), followed by slavery (16%), human rights violations and illegal mining or trade (both 9%). Following a peak in 2012, the number of reports has decreased by 46% in 2017. The numbers of reports, however, was only one lower in 2017 compared to 2004.

5.1 Proportional impact in volume and trend analysis

The analysis indicates that the percentage of carats produced in countries in which unethical occurrences were linked to the diamond industry, expressed in relation to the global production (Figure 2), have decreased over the research period. Nearly half to a fifth of the diamonds produced during the research period took place in a country that was reported to violate ethics in the diamond industry. The cyclic trend reveals three points of interest:

- a There is a drop in the number of unethical reports in the period of 2008–2009, followed by an increase.
- b The number of unethical issues peaked in 2012.
- c The number of reports of ethical violations decreased steadily in the period of 2015–2017, with a significant drop in 2017.

There was a decrease in the proportional impact of potentially tainted diamonds on the global market in 2008–2009. At the same time, global production decreased as well. Due to the economic crisis, the demand for diamond jewellery fell with a CAGR of –9% (Epstein et al., 2012). At the same period, the number of countries where ethical violations occurred increased from 19 to 22. The production of two major producers, Botswana, and the DRC fell sharp in this period, therefore reducing the proportional impact tainted diamonds had on the global market. As the global economy gradually recovered in 2011 and 2012, so did the global production and the proportional impact of tainted diamonds on the global market.

The peak in 2012 could be explained by three scenarios:

- a The production of countries with reported incidents was higher, while the global production was relatively unchanged.
- b The production of countries with reported incidents was similar, while global production was lower.
- c The production of countries with reported incidents was higher, while the global production was lower.

When comparing the production statistics (Figure 3), it is revealed that global production was down from the base year of 2004. However, it has recovered slightly. In 2012, the

production of Botswana decreased by 10.26% (2.3 million carats) from 2011, but the production of the DRC and Zimbabwe increased by 11.82% (2.3 million carats) and 41.84% (3.6 million carats) respectively. Particularly, the production of Zimbabwe increased proportionally more than the slump of Botswana. This country had numerous reports of ethical violations in 2012.

Figure 2 Proportional impact in volume

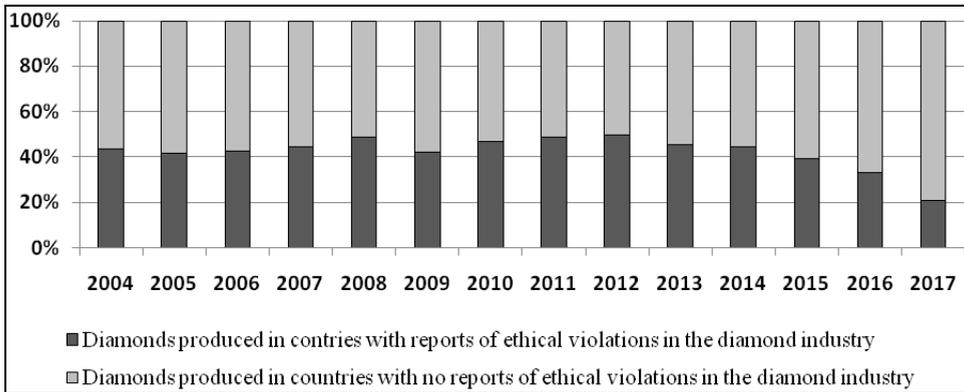
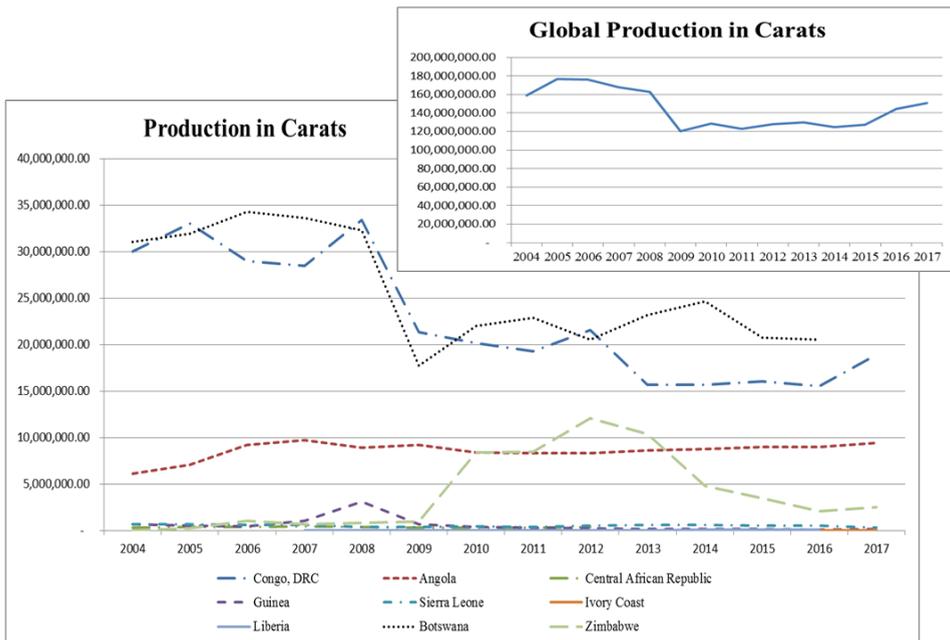


Figure 3 Production in carats of countries with reports of ethical violations in the diamond industry vs. global production (see online version for colours)

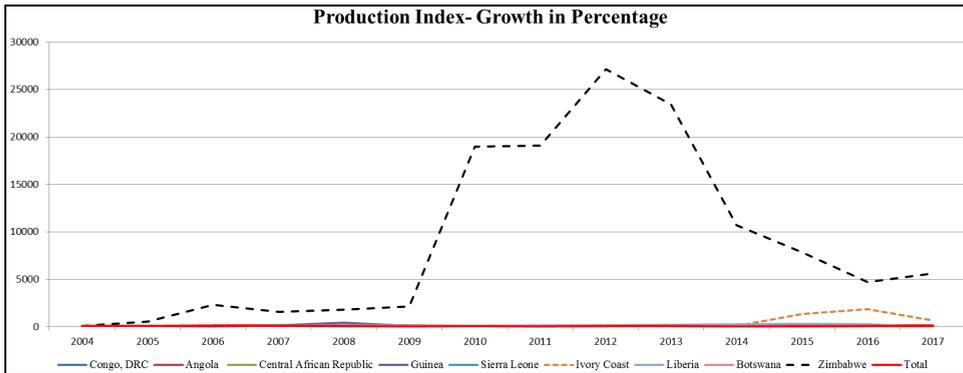


Source: Kimberleyprocessstatistics.org (n.d.)

Figure 4 illustrates the production volume as an index to highlight the significance of Zimbabwe’s growth expressed as a percentage in relation to the base year of 2004 and

relative to the other sourcing countries. As such, the jump in 2012 can be explained by Zimbabwe's production peak, while the global production, although relatively stable, was down from previous years.

Figure 4 Production index (see online version for colours)



The downward trend of 2015–2017 can be explained by a number of phenomena. For consistency purposes, only the Human Rights Reports (State.gov, n.d.) were used. The fact that there were no or fewer reports made in a particular year does not mean that no violations took place. The missing data is one explanatory factor. In the period from 2015 onwards, the proportional impact of tainted diamonds decreased while the global production increased. In 2016, the number of countries with reports of ethical violations grew. The production of countries with human rights abuses and environmental concerns expressed as a percentage of the global production gradually decreased, however. These countries include the DRC, Angola, Guinea, Sierra Leone, Liberia, Botswana, and Zimbabwe. In the same year, the world's largest producer, Russia, which had no reports of ethical violations, produced 40% more carats than the previous year (Kimberleyprocessstatistics.org, n.d.).

The largest variance occurred in 2017, when the percentage of carats potentially mined under circumstances where human rights abuses and negative environmental impacts occurred fell to 20.85%. Unlike preceding years, the Human Rights Reports of the US Department of State did not report environmental issues in Botswana's diamond industry in 2017. This, however, does not mean that no environmental abuse occurred in Botswana in 2017, as other research points out (Wiston, 2017). With a production of 15.22% of the global production, Botswana was the third largest producer in volume. Its redaction from the 2017 data explains the significant drop in the percentage of diamonds produced under potentially unethical conditions. Amidst rampant claims of corruption, theft and industry restructuring, Zimbabwe's official production has steadily declined over recent years (Saunders and Nyamunda, 2016).

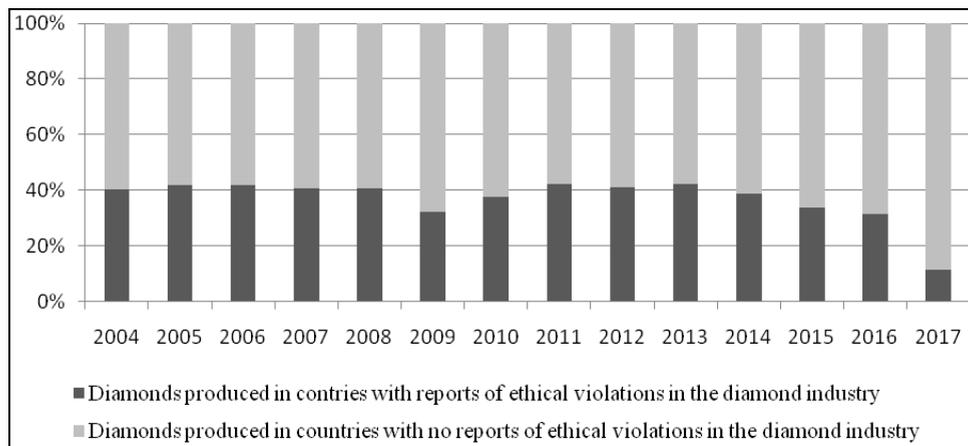
Despite ethical violations, the sourcing countries met the criteria of the KP. As the issues appear prevalent and consistent, one may argue that there are gaps in the definition, policies, and criteria maintained by the KP. It further emphasises gaps between the KP's perception of conflict diamonds and the societal expectations. Many of the issues mentioned could be more broadly categorised as human rights violations, which validate the criticism towards the KP. The concerns posed by the civil society, therefore, are built on legitimate grounds. Until recently, the question was whether the

KP was responsible for expanding its scope, and many stakeholders certainly believed it was. However, supply chain transparency aided by emerging technologies, such as blockchain technology may soon render this question irrelevant.

5.2 Proportional impact in value and trend analysis

The proportional impact expressed in value (Figure 5) displays a similar profile as the proportional impact in volume (Figure 2). From 2004 to 2008 and 2011 to 2013, the proportional impact in both volume and value relative to the global production was between 40% and 49%. For both metrics, the proportional impact in 2009 was between 32% and 42%, in 2010 between 37% and 46%, in 2014 between 38% and 43% and in 2015 and 2017 between 31% and 39%. Both graphs display a drop in 2009 and from 2015 to 2017. The peak in 2012 that was prominent in the graph displaying production volume was more pronounced, whereas the impact in value exhibits an increase spanning the period from 2011 to 2013.

Figure 5 Proportional impact in value



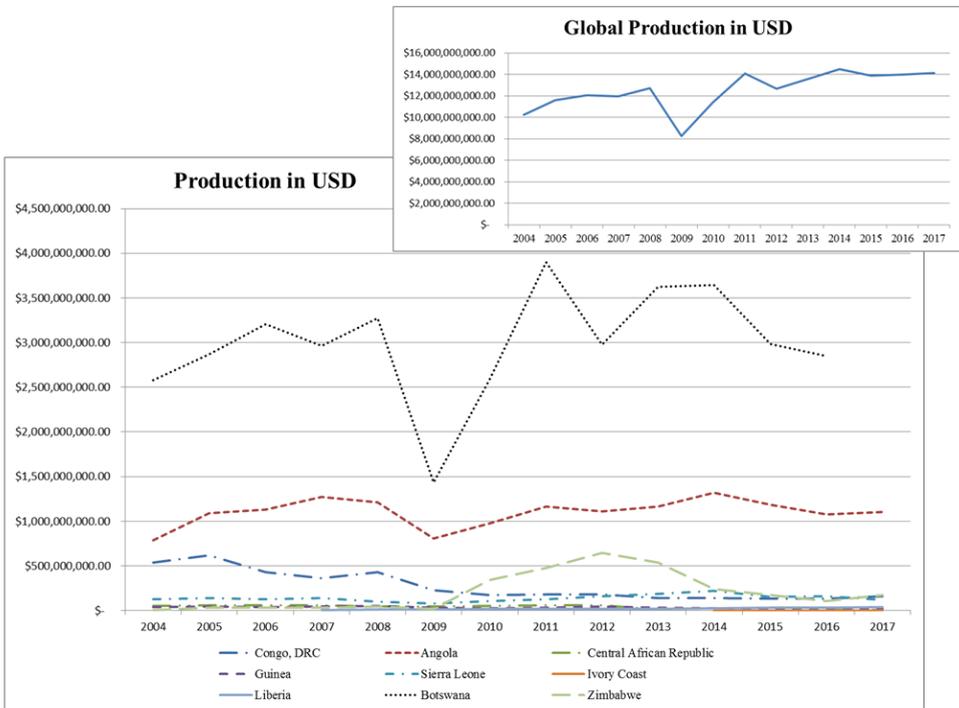
The drop in 2009 is caused by the economic crisis, as the value of the diamonds in diamond jewellery depreciated with a CAGR of -11% (Epstein et al., 2012). The value of rough diamonds traded in 2009 fell by 35.11%. The drop in volume in 2009 and a lower average price per carat explains the drop in value for Botswana (Figure 6). As Botswana went from the largest producer in value to the third largest, this had a significant impact on the global production values (Kimberleyprocessstatistics.org, n.d.). The DRC's production volume witnessed a 36.24% decline in 2009. The global average price per carat in 2008 and 2009 was \$78.16 and \$68.72 respectively, while the DRC's average price per carat was \$12.93 and \$10.60 respectively. Due to the relatively low value per carat, the DRC's impact in terms of value was less pronounced. Angola's average price per carat fell sharply from \$135.83 to \$87.04, while its production volume by increased by 3.72%.

Following the economic crisis, a period of recovery ensued in the diamond industry, starting in 2011 when the demand for diamond jewellery grew with a CAGR of 18%, and the value of the diamond content grew by 33% (Epstein et al., 2012). The value of rough

diamonds traded increased by 23.46% that year (Kimberleyprocessstatistics.org, n.d.). In the period from 2011 to 2013, the proportional impact of diamonds sourced in countries with reports of ethical violations remained stable between 41% and 42%. The increased production volumes of Zimbabwe and the DRC had a noticeable impact in terms of volume in 2012. The average price per carat in 2012 was \$98.82. Zimbabwean diamonds traded at an average of \$53.40 per carat, whereas Congolese diamonds sold for an average of \$8.51 per carat. The low average prices make the overall impact in terms of value considerably less, when compared to volume.

The drop in 2017 is more pronounced in production value than it was in production volume. This was the only year where there were no reports of environmental issues in Botswana. This year, Botswana was the third largest producer in terms of volume and the largest producer in terms of value. Its deduction from the data, due to the lack of reports of ethical violations, explains the significant drop. As a result, 11.51% of the production in terms of value was potentially sourced under unethical circumstances, compared to 20.85% in terms of volume.

Figure 6 Production in USD of countries with reports of ethical violations in the diamond industry vs. global production (see online version for colours)



Source: Kimberleyprocessstatistics.org (n.d.)

6 Conclusions and implications

Industries worldwide are increasingly recognising the importance of supply chain transparency. At the same time, ethical violations continue to be prevalent in the diamond

industry. The research revealed that human rights violations are not isolated cases, but occur systematically. Slavery and child labour occur most, and consumers attach great importance to these issues. The KP has not yet been able to address human rights issues, and, as a result, it is contributing to a false perception that diamonds mined today are ethical. Symbolism is inherently connected to the appeal of diamonds and the association with human suffering could be detrimental. Although the number of reports of unethical sourcing conditions decreased during the research period, in 2017, a fifth of the diamond production in terms of volume and a tenth in terms of value was potentially being recovered under circumstances that cannot be regarded as sustainable or ethical. The concerns posed by the civil society are therefore legitimate. The KP's framework, rigid due to its refusal to reform, will increasingly become insufficient due to the gaps between the KP's perception of conflict diamonds and societal expectations. Policymakers should take note of the shortcomings of the KP, the systematic nature of human rights violations in sourcing countries and of the significance that industry members, the civil society and consumers attach to ethical sourcing. However, industry initiatives may be the most feasible way to affect change as they are more innovative, efficient and agile than governments. Finally, consumer pressure will be an important driver for improvement.

It should be acknowledged that the KP has achieved important accomplishments by uniting governments, the industry, and the civil society and starving armed groups from diamond revenues used to finance conflict. It introduced a collaborative, regulative framework to target a specific human rights debacle that was previously unaddressed in such a structured manner. However, the civil wars that led to the establishment of the KP have ceased. Although conflict still occurs in many areas, the most pressing issue today refers to a broader scope of human rights issues. By maintaining its restrictive definition of conflict diamonds, it appears that the KP is stuck in the past, unable or unwilling to evolve to meet changing needs that better reflect the present.

Sustainability and transparency are requisite in today's world of doing business. According to the UN, the lack of supply chain transparency is the main obstacle to sustainable businesses (Kashmanian, 2017; Zhu et al., 2017). The diamond industry is traditionally and inherently opaque, and the topic of supply chain transparency remains controversial. Given the prevalence of ethical violations, the controversy is understandable. If knowledge of the magnitude and scope of ethical issues, such as child labour and slavery would be public knowledge, retributions in an era where ethical (Bucic et al., 2012), sustainable (Tafrá-Vlahovi, 2012) and political (Zukin et al., 2006; Stolle and Micheletti, 2015) consumerism is thriving could have far-reaching implications.

Currently, only rough diamonds parcels are traced through the KP. Traceability ceases at the point where diamonds are cut and polished (Global Witness, 2013). The newly transformed polished diamonds are subsequently sold to wholesalers, jewellery manufacturers, or retailers. In the process, the gems may be mixed with diamonds from other parcels and change multiple sets of hands before arriving at the consumer. Retailers often lack the knowledge of the origin of the diamonds and the conditions under which they were sourced. The provision of documented proof of origin is typically not a readily available option, and many rely on the mission and the reputation of the KP as a guarantee that unethically sourced diamonds are prevented from entering the trade. In light of the shortcomings of the KP regarding ethical sourcing and their refusal to broaden the scope of the definition of conflict diamonds, there is a need to extend

transparency throughout the supply chain and track individual diamonds. Blockchain technology is emerging as a promising technology to improve supply chain transparency, and organisations like the Gemological Institute of America, Chow Tai Fook (The Diamond Loupe, 2018) and De Beers (Marr, 2018) are starting to deploy it.

Three implications are associated with increasing transparency:

- a Ethical performers will be incentivised to implement transparency and use it as a competitive advantage.
- b Unethical performers will either be encouraged to improve the sourcing conditions.
- c Unethical performers will be motivated to hide unethical practices.

The ethical issues reported have historically been linked to African diamond mining industries. Africa has some of the richest deposits in the world, and it is not uncommon for African governments to have a stake in diamond mines. At the same time, some of the sourcing nations are faced with challenges such as political instability, corruption, lack of resources or an inadequate computing infrastructure to support advanced technologies. Improving sourcing conditions will be a complex and protracted, yet necessary endeavour. Foreign investment, improved global and universally accepted standards, stricter regulations and policies, the acknowledgment and addressing of systematic human rights issues in the diamond industry, enforced punitive actions to hold offenders accountable, and better independent accountability and compliance measures are required to elevate conditions to a consistently sustainable and ethical level while maintaining profitability.

While this study focused on ethical issues in source countries, further research into the state of affairs at other stages in the diamond supply chain would be of interest. The findings of this study could be built upon by including other ‘conflict’ minerals and metals such as gold, tin, tungsten, and tantalum. As gold is a complementary good to diamonds, this would be of particular interest to supplement the research. The use of natural resources potentially associated with conflict or ethical violations has a wide range of implications, particularly when considering ethical consumerism of widely used products such as electronics.

References

- Abdo, D. and Paris, C.M. (2017) ‘Social entrepreneurship in the UAE: challenges and recommendations’, *International Journal of Sustainable Society*, Vol. 9, No. 1, pp.41–60.
- Alluvial Diamond Mining Fact Sheet (n.d.) Diamond Facts, London, pp.1–3 [online] http://www.diamondfacts.org/pdfs/media/media_resources/fact_sheets/Alluvial_Mining_Background.pdf (accessed 28 October 2018).
- Andersson, H. (2011) *Zimbabwe Torture Camp Discovered*, BBC News [online] <http://www.bbc.com/news/world-africa-14377215> (accessed 27 May 2018).
- Bates, R. (2017) *Is the Kimberley Process B.S.?*, JCK [online] <https://www.jckonline.com/editorial-article/is-the-kimberley-process-b-s/> (accessed 27 May 2018).
- Boyd, D. (2012) *The Environmental Rights Revolution*, 1st ed., pp.11–912, UBC Press, Vancouver.
- Bruffaerts, L. (2015) ‘A diamantine struggle: redefining conflict diamonds in the Kimberley Process’, *International Affairs*, Vol. 91, No. 5, pp.1085–1101.
- Brunner, D. (2015) *AWDC Issues Alert Over Fake Sierra Leone KP Certificate* [online] <http://www.idxonline.com/FullArticle?Id=41383> (accessed 27 May 2018).

- Bucic, T., Harris, J. and Arli, D. (2012) 'Ethical consumers among the millennials: a cross-national study', *Journal of Business Ethics*, Vol. 110, No. 1, pp.113–131.
- Bush, G. (2003) *Executive Order 13312 – Implementing the Clean Diamond Trade Act*, Treasury, Washington, pp.999–1001 [online] <https://www.treasury.gov/resource-center/sanctions/Documents/13312.pdf> (accessed 12 June 2018).
- Business-standard.com (2013) *Rapaport Resigns from World Diamond Council* [online] http://www.business-standard.com/article/press-releases/rapaport-resigns-from-world-diamond-council-110020200112_1.html (accessed 27 May 2018).
- Campbell, G. (2009) *Blood Diamonds Are Back*, Foreign Policy [online] <http://foreignpolicy.com/2009/12/24/blood-diamonds-are-back/> (accessed 11 June 2018).
- Carter, C. and Rogers, D. (2008) 'A framework of sustainable supply chain management: moving toward new theory', *International Journal of Physical Distribution & Logistics Management*, Vol. 38, No. 5, pp.360–387.
- Chopra, S. and Meindl, P. (2016) *Supply Chain Management*, 6th ed., pp.504–550, Pearson, Harlow (Essex).
- Davidson, N. (2016) *The Lion that Didn't Roar*, 1st ed., pp.21–72, ANU Press, Canberra.
- Debeersgroup.com (2018) *Flash Data 2018 – De Beers Group* [online] <http://www.debeersgroup.com/en/reports/insight/flash-data/flash-data-2018.html> (accessed 13 August 2018).
- Diamonds.net (2017) *Diamonds.net – Non-Profit Quits Kimberley Process* [online] <http://www.diamonds.net/News/NewsItem.aspx?ArticleID=59676> (accessed 26 December 2017).
- Dodd-Frank Wall Street Reform and Consumer Protection Act (2010) US Congress, Washington, pp.2–849 [online] <https://www.congress.gov/111/plaws/publ203/PLAW-111publ203.pdf> (accessed 12 June 2018).
- Dunn, M. (2013) *Pressure on 'Blood Diamond' Imports* [online] <https://www.heraldsun.com.au/news/victoria/pressure-over-blood-diamond-imports-story/27f2fbc45134c09e1035bdc771347a6c> (accessed 11 June 2018).
- Elkington, J. (2004) 'Enter the triple bottom line', in Henriques, A. and Richardson, J. (Eds.): *The Triple Bottom Line, Does It All Add Up?*, 1st ed., pp.1–16, Earthscan, London.
- Emtairah, T. and Mont, O. (2010) 'Gaining legitimacy in contemporary world: environmental and social activities of organisations', *International Journal of Sustainable Society*, Vol. 1, No. 2, pp.134–148.
- Epstein, A., Fischler, S., Spektorov, Y., Linde, O. and Wetli, P. (2012) *The Global Diamond Industry – A Portrait of Growth*, pp.1–82, Bain and Co, New York.
- European Commission (2016) *EU Reaches Landmark Agreement on Conflict Minerals Regulation* [online] http://europa.eu/rapid/press-release_IP-16-3931_en.htm (accessed 21 June 2018).
- Even-Zohar, C. (2009) *PAC'S Smillie Casts Final 'No Confidence' Vote in KP and Goes Home – IDEX's Memo* [online] <http://www.idexonline.com/Memo?id=32410> (accessed 27 May 2018).
- FATF (2013) *Money Laundering and Terrorist Financing Through the Trade in Diamonds*, Financial Action Task Force, Paris, pp.1–148 [online] <http://www.fatf-gafi.org/media/fatf/documents/reports/ML-TF-through-trade-in-diamonds.pdf> (accessed 27 May 2018).
- Fischman, J. (2014) 'Is diamond smuggling forever? The Kimberley Process Certification Scheme: the first step down the long road to solving the blood diamond trade problem', *University of Miami Business Law Review*, Vol. 13, No. 2, pp.217–242 [online] <https://repository.law.miami.edu/cgi/viewcontent.cgi?article=1108&context=umblr> (accessed 26 May 2018).
- Flynn, D. (2014) *Gold, Diamonds Fuelling Conflict in Central African Republic: U.N., USA* [online] <https://www.reuters.com/article/us-centralafrica-un-panel/gold-diamonds-fuelling-conflict-in-central-african-republic-u-n-panel-idUSKBN0IO21420141105> (accessed 4 July 2018).

- Fowler, R. (2000) *The Fowler Report* [online] <https://www.globalpolicy.org/component/content/article/202/41606.html> (accessed 7 May 2019).
- Friedman, R. (2010) *Diamond Magnate Goes on Hunger Strike* [online] <https://www.jpost.com/Israel/Diamond-magnate-goes-on-hunger-strike> (accessed 27 May 2018).
- GIA (2009) *Diamonds & Diamond Grading*, 4th ed., Gemological Institute of America, Carlsbad, pp.1–240.
- Global Witness (2006) *The Truth About Diamonds*, Global Witness, London, pp.1–7 [online] https://www.globalwitness.org/sites/default/files/import/the_truth_about_diamonds.pdf (accessed 27 May 2018).
- Global Witness (2011) *Global Witness Leaves Kimberley Process, Calls for Diamond Trade to be Accountable* [online] <https://www.globalwitness.org/en/archive/global-witness-leaves-kimberley-process-calls-diamond-trade-be-held-accountable/> (accessed 27 May 2018).
- Global Witness (2013) *The Kimberley Process | Global Witness* [online] <https://www.globalwitness.org/en/campaigns/conflict-diamonds/kimberley-process/> (accessed 26 December 2017).
- Gooch, T. (2008) ‘Conflict diamonds or illicit diamonds: should the difference matter to the Kimberley Process Certification Scheme?’, *Natural Resources Journal*, Vol. 48, No. 1, pp.189–214.
- Grant, R. (2016) *Contemporary Strategy Analysis*, 9th ed., pp.53–284, Chichester, West Sussex, John Wiley & Sons Inc., UK.
- Hardcastle, S. (2001) *BBC News | BUSINESS | Congo Pays The Price For War* [online] <http://news.bbc.co.uk/2/hi/business/1564653.stm> (accessed 26 May 2018).
- Hilson, G. and Clifford, M. (2010) ‘A ‘Kimberley protest’: diamond mining, export sanctions, and poverty in Akwatia, Ghana’, *African Affairs*, Vol. 109, No. 436, pp.431–450.
- Hoffman, A. and Ehrenfeld, J. (2015) ‘The fourth wave: business management and business education in the age of the anthropocene’, in Lawler, E., Mohrman, S. and O’Toole, J. (Eds.): *Corporate Stewardship: Organizing for Sustainable Effectiveness*, Sheffield, Greenleaf Publishing, UK, pp.228–246, <http://dx.doi.org/10.2139/ssrn.2317423> (accessed 19 May 2018).
- Holmes, J. (2007) ‘The Kimberley Process: evidence of change in international law’, *Brigham Young University International Law & Management Review*, Vol. 3, No. 2, pp.213–232 [online] <https://digitalcommons.law.byu.edu/ilmr/vol3/iss2/4/> (accessed 26 May 2018).
- Howard, A. (2015) ‘Blood diamonds: the successes and failures of the Kimberley Process Certification Scheme in Angola, Sierra Leone and Zimbabwe’, *Washington University Global Studies Law Review*, Vol. 15, No. 1, pp.137–159.
- Hrlibrary.umn.edu. (1972) *Declaration of the United Nations Conference on the Human Environment* [online] <http://hrlibrary.umn.edu/instreet/humanenvironment.html> (accessed 10 May 2019).
- Human Rights Watch (2000) *Sierra Leone Rebels Forcefully Recruit Child Soldiers* [online] <https://www.hrw.org/news/2000/05/31/sierra-leone-rebels-forcefully-recruit-child-soldiers> (accessed 26 May 2018).
- Human Rights Watch (2009) *Diamonds in the Rough | Human Rights Abuses in the Marange Diamond Fields of Zimbabwe* [online] <https://www.hrw.org/report/2009/06/26/diamonds-rough/human-rights-abuses-marange-diamond-fields-zimbabwe> (accessed 21 May 2018).
- Human Rights Watch (2010) *Exposing the Blood Diamond Trade* [online] <https://www.hrw.org/news/2010/05/21/exposing-blood-diamond-trade> (accessed 12 August 2018).
- Human Rights Watch (2011) *World Report 2011: Rights Trends in World Report 2011: Democratic Republic of Congo* [online] <https://www.hrw.org/world-report/2011/country-chapters/democratic-republic-congo> (accessed 17 May 2018).
- Human Rights Watch (2016) *Human Rights Watch Statement on the Kimberley Process* [online] <https://www.hrw.org/news/2016/06/06/human-rights-watch-statement-kimberley-process> (accessed 26 December 2017).

- Hummel, J. (2007) 'Diamonds are a Smuggler's best friend: regulation, economics, and enforcement in the global effort to curb the trade in conflict diamonds', *The International Lawyer*, Vol. 41, No. 4, pp.1145–1169 [online] <http://www.jstor.org/stable/40707834> (accessed 26 May 2018).
- Kashmanian, R. (2017) 'Building greater transparency in supply chains to advance sustainability', *Environmental Quality Management*, Vol. 26, No. 3, pp.73–104.
- Kimberleyprocess.com (2013) *Kimberley Process Certification Scheme – Preamble* [online] https://www.kimberleyprocess.com/en/system/files/documents/20131122_kpcs_core_document_eng_amended_clean.pdf (accessed 7 May 2019).
- Kimberleyprocess.com (n.d.) *About | Kimberley Process* [online] <https://www.kimberleyprocess.com/en/about> (accessed 26 December 2017).
- Kimberleyprocessstatistics.org (n.d.) *Kimberley Process – Rough Diamond Statistics* [online] https://kimberleyprocessstatistics.org/public_statistics (accessed 1 March 2018).
- Koyame, M. (2005) 'United Nations resolutions and the struggle to curb the illicit trade in conflict diamonds in Sub-Saharan Africa', *African Journal of Legal Studies*, Vol. 1, No. 2, pp.80–101.
- Kuepfer, J. and Papula, J. (2010) 'Corporate social responsibility – the dilemmas behind the popular concept and how best to address them!', *International Journal of Sustainable Society*, Vol. 2, No. 3, pp.291–305
- Left, S. (2003) *War in Liberia*, *The Guardian* [online] <https://www.theguardian.com/world/2003/aug/04/westafrika.qanda> (accessed 26 May 2018).
- Linde, O., Kudryasheva, G., Geyler, O., Epstein, A. and Fischler, S. (2017) *The Global Diamond Industry 2017: The Enduring Story in a Changing World*, pp.1–40, Bain & Company Inc., New York [online] http://www.bain.com/Images/bain_diamond_report_2017_pages.pdf (accessed 18 May 2018).
- Lusaka Protocol (1994) United States Institute of Peace, Lusaka, pp.1–30 [online] https://www.usip.org/sites/default/files/file/resources/collections/peace_agreements/lusaka_11_151994.pdf (accessed 26 May 2018).
- Marques, R. (2015) *Blood Diamonds: Corruption and Torture in Angola*, 1st ed., pp.1–156, Tinta da China, Lisbon.
- Marques, R. and de Campos, R. (2005) *Lundas – The Stones of Death, Angola's Deadly Diamonds: Human Rights Abuses in the Lunda Provinces, 2004*, Lisbon, pp.1–72 [online] <https://www.rapaportfairtrade.com/Docs/lundas--the-stones-of-death-angolas-deadly-diamond.pdf> (accessed 29 October 2018).
- Marr, B. (2018) *How Blockchain Could End The Trade In Blood Diamonds – An Incredible Use Case Everyone Should Read* [online] <https://www.forbes.com/sites/bernardmarr/2018/03/14/how-blockchain-could-end-the-trade-in-blood-diamonds-an-incredible-use-case-everyone-should-read/#3a379b95387d> (accessed 8 June 2018).
- Martin, J. and Bravo, K. (2015) *The Business and Human Rights Landscape*, 1st ed., p.87, Cambridge University Press, Cambridge.
- Melik, J. (2010) *Diamonds: Does the Kimberley Process Work?*, BBC News [online] <http://www.bbc.com/news/10307046> (accessed 26 May 2018).
- Miller, J. (2015) *Diamonds.net – Angolan Court Slaps Additional Charges on Marques de Morais* [online] <http://www.diamonds.net/News/NewsItem.aspx?ArticleID=51756&ArticleTitle=Angolan+Court+Slaps+Additional+Charges+on+Marques+de+Morais> (accessed 17 May 2018).
- Mining Engineering (2012) 'Group leaves Kimberley process: global witness says 'blood diamonds' continue to enter the market', Vol. 64, No. 1, p.13.
- Nichols, J. (2012) 'A conflict of diamonds: the Kimberley Process and Zimbabwe's Marange diamond fields', *Denver Journal of International Law and Policy*, Vol. 40, No. 4, pp.648–688.

- Nicholson, C. (2017) *An Interview with Rapaport, The Diamond Maverick – Jeweller Magazine: Jewellery News and Trends* [online] <http://www.jewellermagazine.com/Article/7606/An-interview-with-Rapaport-the-Diamond-Maverick> (accessed 27 May 2018).
- Ohchr.org (n.d.) *Special Rapporteur on Human Rights and the Environment* [online] <https://www.ohchr.org/EN/Issues/Environment/SREnvironment/Pages/SREnvironmentIndex.aspx> (accessed 10 May 2019).
- Quénivet, N. (2010) *International Law and Armed Conflict*, 1st ed., pp.161–181, T.M.C. Asser Press, The Hague.
- Rapaport, M. (2010a) *Diamonds.net – TRADE ALERT: Marange Diamonds* [online] <http://www.diamonds.net/MediaCenter/TradeAlert.aspx?ArticleID=32094> (accessed 27 May 2018).
- Rapaport, M. (2010b) *Stop Buying and Selling Blood Diamonds*, pp.1–2, Rapaport, New York [online] https://www.rapaportfairtrade.com/Docs/StopBuying-SellingBloodDiamonds_020110.pdf (accessed 27 May 2018).
- Rapaportfairtrade.com (n.d.) *The Issues* [online] <https://www.rapaportfairtrade.com/What-is-RapFT/The-Issues.aspx> (accessed 11 June 2018).
- Richman, B. (2017) *Stateless Commerce: The Diamond Network and the Persistence of Relational Exchange*, 1st ed., pp.98–100, Harvard University Press, Cambridge.
- Rush, S. and Rozell, E. (2017) ‘A rough diamond: the perils of the Kimberley Process’, *Archives of Business Research*, Vol. 5, No. 11, pp.101–107.
- Sanderson, H. (2018) ‘Blood Diamond’ Agreement Fails Consumers, Says NGO [online] <https://www.ft.com/content/439dad56-fc3a-11e7-9b32-d7d59aace167> (accessed 27 May 2018).
- Saunders, R. and Nyamunda, T. (2016) *Facets of Power*, 1st ed., Weaver Press, Harare.
- Sharma, R. (2012) ‘News on the rocks: exploring the agenda-setting effects of blood diamond in print and broadcast news’, *Media, War & Conflict*, Vol. 5, No. 3, pp.239–253.
- Shaw, D., Carrington, M. and Chatzidakis, A. (2018) *Ethics and Morality in Consumption*, 2nd ed., pp.171–188, Routledge, New York.
- Smillie, I. (2013) ‘Blood diamonds and non-state actors’, *Vanderbilt Journal of Transnational Law*, Vol. 46, No. 4, pp.1003–1023.
- Snyder, R. and Bhavnani, R. (2005) ‘Diamonds, blood, and taxes’, *Journal of Conflict Resolution*, Vol. 49, No. 4, pp.563–597.
- Southward, F. (2013) *Kimberley Process: Observations from the Sidelines, Part I*, pp.2–24, IPIS Research, Antwerp [online] http://ipisresearch.be/wp-content/uploads/2013/11/20131120_KimberleyV2.pdf (accessed 27 May 2018).
- Southward, F., Weyns, Y., Hoex, L. and Hilgert, F. (2014) *Diamonds in the Central African Republic*, pp.1–13, IPIS Research, Antwerp [online] http://ipisresearch.be/wp-content/uploads/2014/12/20141222_Insight_diamonds1.pdf (accessed 4 July 2018).
- Spektorov, Y., Linde, O., Cornelissen, B., Khomenko, R., Epstein, A. and Fischler, S. (2013) *The Global Diamond Report 2013: Journey through the Value Chain*, pp.1–72, Bain & Company Inc., New York [online] http://www.bain.com/Images/BAIN_REPORT_The_global_diamond_report_2013.pdf (accessed 26 December 2017).
- State.gov (n.d.) *Human Rights Reports* [online] <https://www.state.gov/j/drl/rls/hrrpt/> (accessed 1 March 2018).
- Stolle, D. and Micheletti, M. (2015) *Political Consumerism*, 2nd ed., p.39, Cambridge Univ. Press, New York.
- Tafra-Vlahovi, M. (2012) ‘The role of public relations in the growth of sustainable consumerism’, *International Journal of Management Cases*, Vol. 14, No. 1, pp.247–255.
- The Diamond Loupe (2016) *AWDC Issues Alert Over Fake Sierra Leone Kimberley Process Certificate* [online] <https://www.thediamondloupe.com/articles/2016-04-14/awdc-issues-alert-over-fake-sierra-leone-kimberley-process-certificate> (accessed 27 May 2018).

- The Diamond Loupe (2018) *GIA & Chow Tai Fook Launch Pilot for Blockchain-Based Grading Report* [online] <https://www.thediamondloupe.com/laboratories/2018-05-24/gia-chow-tai-fook-launch-pilot-blockchain-based-grading> (accessed 8 June 2018).
- Tyrrell, T., Paris, C.M. and Biaett, V. (2012) 'A quantified triple bottom line for tourism: experimental results', *Journal of Travel Research*, Vol. 52, No. 3, pp.279–293.
- UN Environment (n.d.) *What Are Environmental Rights?* [online] <https://www.unenvironment.org/explore-topics/environmental-rights-and-governance/what-we-do/advancing-environmental-rights/what> (accessed 10 May 2019).
- UN News (2002) *Security Council Votes to Continue Ban on Rough Diamonds from Sierra Leone* [online] <https://news.un.org/en/story/2002/12/53322-security-council-votes-continue-ban-rough-diamonds-sierra-leone> (accessed 26 May 2018).
- UN Secretary-General (1998) *The Causes of Conflict and the Promotion of Durable Peace and Sustainable Development in Africa*, pp.1–32, UN Secretary-General [online] <https://oldsite.issafrica.org/uploads/CAUSECONFLICT.PDF> (accessed 26 May 2018).
- Un.org (1948) *Universal Deceleration of Human Rights* [online] [http://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/217\(III\)](http://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/217(III)) (accessed 4 June 2018).
- Un.org (n.d.) *Human Rights* [online] <https://www.un.org/en/sections/issues-depth/human-rights/> (accessed 7 May 2019).
- Undocs.org (2001) *United Nations Resolution 55/56* [online] <https://undocs.org/A/RES/55/56> (accessed 7 May 2019).
- Voa (2018) *Mugabe Faces Jail Over Diamond Revenue Corruption* [online] <http://observer.ug/news/headlines/57814-mugabe-faces-jail-over-diamond-revenue-corruption.html> (accessed 24 June 2018).
- Wallis, A. (2005) 'Data mining: lessons from the Kimberley Process for the United Nation's development of human rights norms for transnational corporations', *Northwestern Journal of International Human Rights*, Vol. 4, No. 2, pp.388–417.
- Wexler, L. (2011) 'Regulating resource curses: institutional design and evolution of the blood diamond regime', *Cardozo Law Review*, Vol. 31, No. 5, pp.1717–80.
- Winetroub, A. (2013) 'A diamond scheme is forever lost: the Kimberley Process's deteriorating tripartite structure and its consequences for the scheme's survival', *Indiana Journal of Global Legal Studies*, Vol. 20, No. 2, pp.1425–1444.
- Wiston, M. (2017) 'Status of air pollution in Botswana and significance to air quality and human health', *Journal of Health and Pollution*, Vol. 7, No. 15, pp.8–17.
- Zhu, S., Song, J., Hazen, B., Lee, K. and Cegielski, C. (2017) 'How supply chain analytics enables operational supply chain transparency', *International Journal of Physical Distribution & Logistics Management*, Vol. 48, No. 1, pp.47–68.
- Zimnisky, P. (2014) *Marange May Not Be The Worlds Largest Diamond Producer For Much Longer | Kitco Commentary* [online] <http://www.kitco.com/ind/Zimnisky/2014-02-10-Marange-May-Not-Be-The-Worlds-Largest-Diamond-Producer-For-Much-Longer.html> (accessed 24 June 2018).
- Zimnisky, P. (2018) *Global Diamond Production by Mine 2017 – Paul Zimnisky | Diamond Industry Analysis* [online] <http://www.paulzimnisky.com/global-diamond-production-by-mine-2017> (accessed 13 August 2018).
- Zukin, C., Keeter, S. and Andolina, M. (2006) *A New Engagement? Political Participation, Civic Life, and the Changing American Citizen*, 1st ed., Oxford University Press, New York.