Analysing the characteristics of post-disaster funding that make it susceptible to the risk of economic crime: a South African frame of reference

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Abstract

Purpose – Research indicates a significant risk of economic crime associated with post-disaster funding. The purpose of this paper is to assess the characteristics of post-disaster funding that make it susceptible to the risk of economic crime and to analyse how the statutory and regulatory disaster risk management instruments of South Africa aim to manage post-disaster events.

Design/methodology/approach – This paper uses secondary sources such as, but not limited to, legislation, institutional reports, textbooks and peer-reviewed academic journal articles.

Findings – Post-disaster funding is inherently susceptible to economic crime due to characteristics identified such as time pressure; substantial inflow of money, goods and services; inadequate needs assessment, large-scale reconstruction and the involvement of contractors or suppliers; power imbalance; and the responsibility of governments. The Disaster Management Act and National Disaster Management Framework provide an extensive regulatory framework for mitigating post-disaster funding risks by attempting to find a balance between quick aid distribution and financial controls. This paper finds that even though South Africa is known to have some of the best disaster risk management laws, the pervasive nature of the characteristics could still render post-disaster funding structures susceptible to the risk of economic crime.

Originality/value – There is limited scientific research on this topic. The expected prevalence of future disasters requires the regulatory and legislative disaster risk management instruments to evolve

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concomitantly. Research on this topic must continue to ensure that risks associated with post-disaster funding and its susceptibility to economic crime can be mitigated as far as possible.

Keywords Economic crime, Post-disaster funding, Disaster risk management, Disaster Management Act, National Disaster Management Framework, South Africa

Paper type Literature review

1. Introduction

According to Kunguma *et al.* (2021, p. 1), disasters have become more frequent on both a global and local scale. Between 1970 and 2020 the average reported amount of medium- and large-scale disasters grew from 90 to 500 annually, whereas 387 global disasters were recorded in 2022 (EM-DAT, 2022, p. 4; UNDRR, 2022, p. 17). South Africa also experienced various disasters in recent years, which included the 2007/2008 drought, the Knysna veld fires in 2018, the COVID-19 pandemic in 2020 and the KwaZulu-Natal floods in 2022 (Lippke and Wangare, 2022; Mashigo, 2023; Ngaka, 2012, p. 1; Roelf, 2020).

According to Calossi *et al.* (2012, p. 652), disasters trigger a complex series of events which involve a wide variety of institutional and societal role-players. Emergency conditions following disasters often necessitate an immediate humanitarian response to provide relief to those affected. A considerable amount of funds and resources are gathered, transferred, allocated and dispersed during the post-disaster funding process, which involves numerous international as well as national and local organisations and entities (Calossi *et al.*, 2012, p. 652). Nearly every disaster worldwide has captured the interest of the media, the general public, national governments and international organisations and as a result, emergency funding and humanitarian aid have increased significantly in recent years (Calossi *et al.*, 2012, p. 653).

Humanitarian aid attempts to assist those affected by disasters but numerous incidents of fraud and corruption are however frequently discovered afterwards (Fenner and Mahlstein, 2009, p. 241). Although disasters are unlikely to generate corruption on their own, instances such as disaster relief windfalls and the abuse of international assistance in post-disaster circumstances could increase this risk (Zafar *et al.*, 2023, p. 3). For this paper, it is important to contextualise the different terminology used when referring to fraud, corruption and economic crime due to their interchangeable use across different legal jurisdictions and sources.

Willitts-King and Harvey (2005, p. 1) dvefined corruption in the humanitarian context broadly as "the misuse of entrusted power for private gain and could include: financial fraud and embezzlement, misuse of agency assets, theft, diversion, bribes, abusive/coercive practice", whereas fraud can be defined as "the unlawful and intentional making of a misrepresentation which causes actual prejudice, or which is potentially prejudicial to another" and can include for example bid-rigging, fictitious invoices, bribery, theft, tax fraud, bankruptcy fraud and insurance fraud (Anti-Intimidation and Ethical Practice Forum, 2019, pp. 1–2).

According to Europol (2022), economic crime can be defined as "illegal acts committed by an individual or a group of individuals to obtain a financial or professional advantage". Economic crime could be understood as an umbrella term which can include capital investment fraud, misleading customers, fraudulent bankruptcy, tax evasion, credit and insurance fraud, credit card fraud, cybercrime, corruption and money laundering. (Kohalmi and Mezei, 2015, pp. 36–39; Transparency International, 2021, p. 3).

Based on the discussion above it is clear that these offences are intricately woven. Due to the interconnectedness of the respective terminologies, this paper will utilise the term "economic crime" to encompass the aforementioned offences, unless stated expressly otherwise by a source. To maintain the integrity of the sources used in this paper, the terms "corruption and fraud" may be referred to but will still fall within the broad context of economic crime as discussed above.

This paper assesses the characteristics of post-disaster funding that make it susceptible to the risk of economic crime and analyses how the statutory and regulatory disaster risk management instruments of South Africa aim to manage post-disaster events. The analysis will focus on the relevant provisions of the Disaster Management Act (DMA) and the National Disaster Management Framework (NDMF). The DMA mandates the creation of various structures within the South African Government (the government) which will be analysed in this paper to obtain a better understanding of their decision-making responsibilities and roles in post-disaster funding.

An in-depth analysis of the DMA and NDMF is a pre-requisite for this paper to clearly understand the roles and responsibilities of the different role-players and the procedures that should be followed when allocating post-disaster funding. A high-level discussion of the characteristics of post-disaster funding that make it susceptible to the risk of economic crime will follow based on different international studies. It is important to highlight risks in post-disaster activities to enhance the knowledge and understanding in the field, which will contribute towards attaining sustainable solutions to the problem.

2. Background to the Disaster Management Act

Until 1994, South African disaster management initiatives were regulated by the Civil Protection Act 67 of 1977 but this law was, however, proven to be insufficient after the occurrence of severe floods in the Western Cape in 1994 (Van Niekerk, 2014, p. 858; Zuma *et al.*, 2012, p. 128). This consequently led to legislative and organisational initiatives to review the law and integrate disaster management efforts (Zuma *et al.*, 2012, p. 128). As a result, the DMA 57 of 2002 as well as the NDMF of 2005 was enacted, making South Africa a leader among the African nations in establishing a comprehensive disaster risk management legislation (Van Niekerk, 2014, p. 858).

The DMA (57 of 2002) defines a "disaster" as a natural or human-induced event, whether gradual or sudden, that takes place on a large scale or in a specific area. It causes or has the potential to cause death, injury or illness; property, infrastructure or environmental damage; or disturbance in a community's daily lives. In addition, it surpasses the capacity of those affected to manage its consequences with their own resources (DMA 57 of 2002).

The DMA mandates the delegation of disaster risk management activities to the different levels of government, namely local, provincial and national and provides detailed explanations of the various disaster risk management structures that should be created within these government levels (Van Niekerk, 2014, p. 860).

3. Structures established in terms of the Disaster Management Act 57 of 2002

The DMA stipulates that various structures should be established within the government to effectively manage disaster risks in South Africa. Structures implemented on the national level are also established on the provincial and municipal levels to foster an integrated and coordinated strategy for disaster management. Figure 1 below illustrates the specific structures that should be implemented under the DMA. Each of these structures plays a unique role in the distribution and authorisation of post-disaster funding and will be

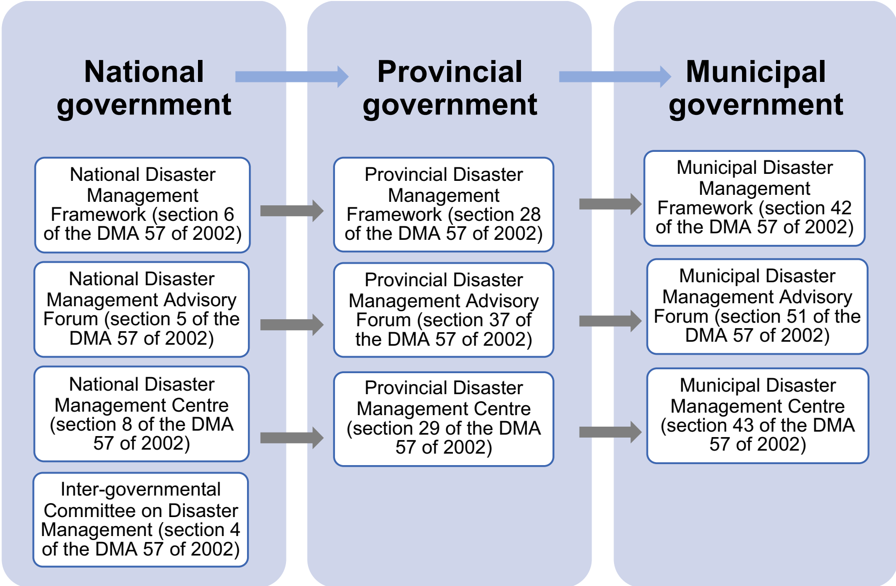

Figure 1.
South African disaster management structure

Source: Authors' representation

discussed later on in this paper when we look at the funding structures in terms of the NDMF.

The illustration below provides an overview of the different structures at the national, provincial and municipal levels in South Africa:

3.1 National disaster management framework

In terms of section 6 of the DMA (57 of 2002), the Minister is required to prescribe an NDMF. This framework, which was issued in May 2005, directs and guides all areas of disaster risk management in South Africa (Van Niekerk *et al.*, 2018, p. 5). According to Van Niekerk (2014, p. 861), the DMA includes guidelines on "what" disaster risk management in South Africa ought to be, whereas the NDMF attempts to demonstrate "how" the Act's objectives can be accomplished.

Section 7 of the DMA (57 of 2002) stipulates that the NDMF should guide the creation and implementation of disaster management activities, as intended by the DMA while emphasising the fundamental principles of prevention and mitigation of disasters (DMA 57 of 2002). Furthermore, the NDMF should assign specific disaster management responsibilities to the national, provincial and municipal governments and oversee the development and execution of these responsibilities. The NDMF also provides methods for different state departments to fund disaster risk reduction, post-disaster recovery, as well as payments to the victims of disasters (DMA 57 of 2002).

The NDMF is separated into two sections, namely, key performance areas (KPA) and enablers (Van Niekerk, 2014, p. 861). The NDMF comprises out of four KPAs and three enablers. Enabler 3 of the NDMF sets out the processes and procedures that should be followed by each governmental structure to obtain and allocate funding for post-disaster recovery and rehabilitation initiatives. For the purposes of this paper, the focus will be placed on Enabler 3 to evaluate the relevant funding arrangements for disasters.

3.2 *Inter-governmental committee on disaster management*

The DMA furthermore requires the President of the Republic of South Africa to form an Inter-governmental Committee on Disaster Management (DMA 57 of 2002) in terms of section 4, which will be required to report to Cabinet on disaster management coordination across the different domains of government. The Committee is also tasked with providing advice and recommendations to Cabinet on disaster management challenges, as well as the development of a NDMF that focuses on providing a coordinated and uniform strategy for disaster management in the Republic (DMA 57 of 2002). The Inter-governmental Committee on Disaster Management therefore serves as an oversight body while providing recommendations on "how" the DMA's objectives can be reached.

3.3 *National Disaster Management Advisory Forum*

According to section 5 of the DMA, the Minister must create a National Disaster Management Advisory Forum (NDMAF). The NDMAF should provide a platform where national, provincial and local governments, as well as the various other disaster management role-players, can discuss and coordinate their efforts on disaster-related matters. The forum can use these measures to present suggestions concerning the NDMF to the Inter-governmental Committee on Disaster Management (DMA 57 of 2002).

3.4 *National Disaster Management Centre*

The formation of a National Disaster Management Centre (NDMC) is considered to be the most significant element of the new DMA (Van Niekerk, 2006, p. 106). According to section 15 of the DMA (57 of 2002), the NDMC is tasked to oversee the adherence to the DMA and NDMF by governments and statutory functionaries, as well as to monitor their post-disaster recovery efforts. The NDMC operates as a channel and depository for information regarding disasters, future disasters and disaster management and must provide suggestions on disaster management funding and initiate and encourage initiatives for obtaining funds as will be discussed further in this paper (DMA 57 of 2002).

The NDMC should actively build communication channels with all the role-players and participate in discussions to overcome disaster risks and vulnerability concerns (Van Niekerk, 2006, p. 106). This includes communication avenues with foreign disaster management agencies, particularly agencies that fulfil similar functions to those of the National Centre, which will ultimately promote the exchange of information and provide access to international expertise and assistance (DMA 57 of 2002).

3.5 *Disaster management at a provincial level*

Structures developed at the national level are also formed at the provincial level to provide consistency and sustainability in disaster management processes throughout South Africa (Van Niekerk, 2006, p. 108). As a result, section 28 of the DMA (57 of 2002) requires every province to develop and implement their own disaster management framework that aligns with the rules and regulations of the DMA, as well as the NDMF.

Section 37 of the DMA additionally provides for the creation of a Provincial Disaster Management Advisory Forum to provide an opportunity for provincial governments and relevant stakeholders to participate in discussions and coordinate their provincial disaster management efforts (DMA 57 of 2002; Van Niekerk, 2006, p. 108).

Finally, Provincial Disaster Management Centres (PDMC) should furthermore be established, in terms of section 29 of the DMA (57 of 2002). The PDMC's functions are equivalent to those of the national centre but operate on the provincial level (Van Niekerk, 2006, p. 108). The provincial centre, like the NDMC, should provide recommendations on disaster management funding in the province and initiate and promote measures to make the funding accessible. The centre should exercise its powers in accordance with both the National and Provincial Disaster Management Frameworks (PDMF) and align its activities with the NDMC (DMA 57 of 2002).

3.6 Disaster management at a municipal level

Every district or municipality is required to create a Municipal Disaster Management Framework (MDMF) (Section 42), a Municipal Disaster Management Advisory Forum (MDMAF) (Section 51) and a Municipal Disaster Management Centre (MDMC) (Section 43), similar to the structures created on the provincial and national level (DMA 57 of 2002).

The MDMF ensures a coordinated approach to disaster management in the area which should be in line with the DMA, NDMF as well as the applicable PDMF (DMA 57 of 2002). In addition, the creation of an MDMAF provides a foundation for the municipality and relevant role-players to engage in discussions and to collaborate on coordinating their actions on disaster management efforts at the municipal level (DMA 57 of 2002).

The Act requires the establishment of MDMCs whose functions and responsibilities are equivalent to those of the national and provincial centre with the exception that it operates on the municipal level. The recommendation and facilitation of municipal disaster management funding are the responsibility of the MDMC (DMA 57 of 2002). The centres should operate in accordance with the NDMF, PDMF and MDMF and collaborate with both the NDMC and the corresponding PDMC (DMA 57 of 2002).

4. Declaring a disaster in terms of the Disaster Management Act

The DMA requires the establishment of the above-mentioned structure to prevent or reduce the risk of disasters in South Africa on a day-to-day basis. Disaster can however not necessarily be avoided (Van Niekerk *et al.*, 2018, p. 2) and as a result, the DMA also makes provision for the declaration of a state of disaster.

The South African residents have a reasonable expectation, derived from the Constitution of the Republic of South Africa (1996), that the government will implement disaster regulations and guidelines in a way that adheres to the rule of law, acknowledges human rights and supports constitutional values, both during and after the occurrence of a disaster (Dube, 2023, p. 143). As a result, the Constitution grants the government authority to exercise emergency powers merely to the extent necessary to overcome the national disaster (Dube, 2023, p. 144).

In terms of section 27 of the DMA (57 of 2002), the Minister has the power to declare a national state of disaster if current legislation and contingency plans fail to empower the national executive to effectively address a national disaster, or if there are other exceptional circumstances that justify the declaration (DMA 57 of 2002). These directives include, but are not limited to, the following (DMA 57 of 2002):

- the distribution of national government resources;
- emergency procurement procedures;
- the facilitation of post-disaster recovery and rehabilitation; or
- measures to promote international assistance.

The above-mentioned powers may be used solely to the extent required for offering assistance and protecting the general public, providing relief to those affected, protecting property, preventing or countering disruptions and addressing the consequences of the disaster (DMA 57 of 2002).

If a provincial disaster occurs, the Premier of the province has the power, after consulting with the other Members of the Executive Council (MEC), to declare a provincial state of disaster by publishing a notice in the Provincial Gazette in terms of section 41 of the DMA (57 of 2002). Similarly, the municipal council, which holds the primary responsibility of coordinating and managing local disasters, has the power to declare a local state of disaster by publishing a notice in the Provincial Gazette, as stipulated in section 55 of the DMA (57 of 2002).

The functions and powers of the Premier of the province and the Council of a municipality following the declaration of a provincial or local state of disaster are similar to those of the minister during a national state of disaster, with the exception that it operates on the provincial and municipal levels.

Once a disaster is declared by the relevant role-players, governments will turn to the DMA and NDMF to initiate the processes of obtaining post-disaster funding. This will ultimately enable them to reduce the negative consequences of a disaster and to assist those affected by the disaster.

5. Disaster funding in terms of the Disaster Management Act and the National Disaster Management Framework

Disaster management funding plays an important role in mitigating or reducing the risks associated with disasters and is typically allocated post-disaster to support reconstruction efforts and to aid those affected by the disaster.

Disaster risk management differs from other public services in that it is inherently unpredictable, necessitating an immediate response. As a result, it is essential to find a balance within the financing framework that considers both the importance of financial controls and oversight, as well as the necessity to ensure that swift response and recovery initiatives are not hindered (Minister for Provincial and Local Government, 2005, p. 91).

Disaster funding in South Africa is governed by the following legislation (Minister for Provincial and Local Government, 2005, p. 88):

- Constitution of the Republic of South Africa 108 of 1996;
- Disaster Management Act 57 of 2002;
- Public Finance Management Act 1 of 1999 (PFMA);
- Municipal Finance Management Act 53 of 2003 (MFMA); and
- Municipal Systems Act, 2000 32 of 2000.

For the purposes of this paper, the focus will however be placed on disaster management funding in terms of the DMA and the NDMF. Sections 56 and 57 of the DMA set out the funding mechanisms of disasters in South Africa (Coetzee *et al.*, 2011, p. 95). Aside from these two sections, there are no additional instructions regarding the allocation of funds or any alternatives for financing which impose limitations. It is the NDMF that establishes these structures (Coetzee *et al.*, 2011, p. 95).

According to Section 7(2)(k) of the DMA (57 of 2002), the NDMF must include a structure within which the different government agencies can provide funding for disaster risk management initiatives including post-disaster rehabilitation and recovery efforts and payment to those impacted by disasters. The DMA aims to promote budget allocation for disaster recovery and rehabilitation by utilising threshold funding. It grants the Minister the authority to set a percentage of a provincial or municipal government entity’s budget as a threshold for obtaining national funding and the degree to which they have implemented disaster reduction measures will be considered when evaluating these requests (Minister for Provincial and Local Government, 2005, p. 89).

Enabler 3 of the NDMF provides recommendations to the government regarding the funding of disaster management activities including start-up activities, disaster risk management ongoing operations, disaster risk reduction, response, recovery and rehabilitation activities and training and capacity-building programmes (Minister for Provincial and Local Government, 2005, p. 93). For the purpose of this paper, the focus will, however, be placed on funding relating to disaster response, recovery and rehabilitation operations.

5.1 Disaster response and recovery operations

The main principle guiding the DMA's funding regulation is that all organs of state must set aside funds for disaster response and recovery costs (Minister for Provincial and Local Government, 2005, p. 103). The respective government entity may seek financial support from the national government after their allocated funds for disaster response and recovery initiatives have been depleted, but assistance will however only be granted after the preventative measures implemented by the organ of state were evaluated (Minister for Provincial and Local Government, 2005, p. 103).

The DMA establishes the concept of self-funding by authorising the Minister to determine a specific percentage of a provincial or municipal government entity's budget that will serve as a threshold for obtaining future payments from the central contingency fund (Minister for Provincial and Local Government, 2005, p. 103). Since provinces do not raise a large portion of their own revenue, it is recommended that a percentage should be determined according to their expected expenditure (Minister for Provincial and Local Government, 2005, p. 103).

Municipalities, on the contrary, generate a significant portion of their own income but given the substantial differences in revenue-raising capacity among municipalities, it is recommended that municipalities be classified based on their own revenue (Minister for Provincial and Local Government, 2005, p. 103). Table 1 demonstrates the NDMF's proposed threshold percentages for provincial and municipal governments.

In the event of a provincial disaster, the provincial government should be permitted to obtain funding from the provincial contingency fund when the threshold is reached and if additional funds are required, the province has the option to request financial assistance from the national government (Minister for Provincial and Local Government, 2005, p. 104). On the contrary, municipalities should be authorised to obtain financial assistance from their provincial governments once their thresholds have been reached (Minister for Provincial and Local Government, 2005, p. 104).

According to the NDMF, funding arrangements must incorporate a system that permits the quick release of funds while still ensuring that proper controls are in place when a

Table 1. Proposed threshold percentages for provincial and municipal governments (Minister for Provincial and Local Government, 2005, p. 104)

Organ of state	Basis for calculating provision	Threshold percentage
Provincial departments	Budgeted expenditure	1.2
Metropolitan municipalities	Own revenue	0.5
Municipality with own revenue of over R150m (excluding metros)	Own revenue	0.6
Municipality with own revenue of R50m–R150m	Own revenue	0.8
Municipality with own revenue of R1m–R50m	Own revenue	1.0

Source: Authors' representation

national disaster is declared. As a result, only the Minister in charge of enforcing the DMA has the power to approve the release of emergency funds from the central contingency fund, and this power cannot be transferred (Minister for Provincial and Local Government, 2005, p. 105).

Furthermore, National Treasury may issue regulations directing payments from the National Revenue Fund according to Section 76(j) of the Public Finance Management Act 1 of 1999 (Minister for Provincial and Local Government, 2005, p. 105). As a result, the NDMF advises that National Treasury should issue new regulations which allow a certain percentage of the National Revenue Fund to be withdrawn for emergency response operations and to support response efforts in surrounding nations (Minister for Provincial and Local Government, 2005, p. 105).

This method will enable the Director-General of National Treasury to release funds, not exceeding the prescribed percentage (0.25%), from the National Revenue Fund upon the request of the Head of the NDMC and has the benefit of enabling the prompt release of funds for response activities (Minister for Provincial and Local Government, 2005, p. 105). The Head of the NDMC is responsible for the use of these funds and will be accountable to the Minister, who is in turn accountable to Parliament (Minister for Provincial and Local Government, 2005, p. 105). Provinces may adopt similar processes that permit the PDMC Head, who will be accountable to the MEC, to withdraw funds from the Provincial Revenue Fund in an emergency (Minister for Provincial and Local Government, 2005, p. 105).

5.2 Rehabilitation and reconstruction

The DMA assigns the responsibility for infrastructure rehabilitation and restoration to the organ of state in charge of maintaining such infrastructure (Minister for Provincial and Local Government, 2005, p. 106). Restoration and reconstruction activities can be funded by own budgets, conditional grants, reprioritisation within existing capital budgets and access to the central contingency fund (Minister for Provincial and Local Government, 2005, p. 106).

5.2.1 Own budget. Depending on the damage to infrastructure, governmental entities may be able to cover rehabilitation and reconstructing expenditures up to a prescribed threshold from their own resources (Minister for Provincial and Local Government, 2005, p. 106). National organs of state and provincial governments that regularly experience disasters must cover the majority of their own expenses (Minister for Provincial and Local Government, 2005, p. 106). The Minister may however decide to raise the threshold for specified provincial institutions once these governmental agencies estimate the total cost of disasters and report their estimates to the NDMC (Minister for Provincial and Local Government, 2005, p. 106).

5.2.2 Conditional grants. The Provincial Infrastructure Grant may be used for restoration and reconstruction expenses at the provincial level if evidence was provided that risk reduction strategies have been incorporated into reconstruction efforts to mitigate future disaster losses, whereas municipalities may obtain funding using the Municipal Infrastructure Grant (Minister for Provincial and Local Government, 2005, p. 106).

5.2.3 Reprioritisation within existing capital budgets. Provincial and municipal government agencies are expected to produce three-year capital plans outlining their medium-term capital spending (Minister for Provincial and Local Government, 2005, p. 107). Provinces may, with the input of their MEC, reprioritise their capital budgets with the assistance of their MECs to complete the essential restoration projects which will allow them to move current obligations to the outer years of the Medium-Term Expenditure Framework and use funds to support restoration and reconstruction efforts (Minister for Provincial and Local Government, 2005, p. 107). The same procedure may be used at the local level if the municipal council authorises the reprioritised budget (Minister for Provincial and Local Government, 2005, p. 107).

5.2.4 Access to the central contingency fund. Accessibility to the central contingency fund for restoration efforts should be limited to essential infrastructure and should only be utilised if all other options fail (Minister for Provincial and Local Government, 2005, p. 107). To ensure that requests are submitted purely for rehabilitation and reconstruction purposes, each reconstruction project needs to be justified individually (Minister for Provincial and Local Government, 2005, p. 107). The national government can justify its requests to the NDMC, but certain projects may be subject to counter-funding requirements imposed by the NDMC (Minister for Provincial and Local Government, 2005, p. 107).

After depleting their own resources, provincial departments can seek funding from the central contingency fund for rehabilitation and reconstruction, based on a matching principle (Minister for Provincial and Local Government, 2005, p. 107). The suggested ratio for accessing these funds is 75:15 and helps to mitigate the negative incentives associated with accessing national funds, while compelling provinces to explore alternative funding avenues (Minister for Provincial and Local Government, 2005, p. 107). Furthermore, municipalities may be granted access to the central contingency fund for the restoration of assets required to deliver basic services (Minister for Provincial and Local Government, 2005, p. 107).

6. Characteristics of post-disaster funding that make it susceptible to economic crime

According to Bailey *et al.* (2012, p. 143), the main objective of post-disaster funding is to preserve human life during times of disaster and to return infrastructure and the environment to a more resilient state. Nonetheless, several characteristics of post-disaster funding make it particularly prone to the risk of corruption (Bailey *et al.*, 2012, p. 143). As explained above, the term "economic crime" contains many offences, one of which includes corruption.

Evaluating corruption risks within humanitarian projects requires an understanding of the complexities of such an environment (Maxwell *et al.*, 2008, p. 4). Several factors contribute to the uniqueness of post-disaster funding processes, which includes its characteristics (Maxwell *et al.*, 2008, p. 4). Although the risk of corruption in post-disaster funding has not been the subject of much research (Willitts-King and Harvey, 2005, p. 19), different international institutions have however outlined these characteristics in their studies which include, but is not limited to, the following:

- The Basil Institute of Governance in its article titled "Curbing the Risks of and Opportunities for Corruption in Natural Disaster Situations" (included in a report published by the International Development Law Organisation) (Fenner and Mahlstein, 2009).
- Tufts University, Overseas Development Institute and Transparency International in their report titled "Preventing Corruption in Humanitarian Assistance" (Maxwell *et al.*, 2008).
- Overseas Development Institute in their report titled "Managing the risks of corruption in humanitarian relief operations" (Willitts-King and Harvey, 2005).
- Humanity Policy Group, Transparency International and U4 Anti-Corruption Resource Centre in their report titled "Mapping the Risks of Corruption in Humanitarian Action" (Ewins *et al.*, 2006).

This paper will attempt to identify relevant characteristics of post-disaster funding that make it susceptible to the risk of economic crime based on the above-mentioned studies. The pertinent characteristics extracted from the referenced reports were identified based on their consistent inclusion. Although these reports are the main sources used in this section, other sources will also be referred to, in order to aid the discussion.

The characteristics of post-disaster funding identified that make it susceptible to the risk of economic crime include time pressure; large inflows of money, goods and services into the country; inadequate needs assessment; large-scale reconstruction and involvement of contractors/suppliers; power imbalance; the responsibility of governments; and conflicted interests, which will be discussed in further detail below. This discussion of the different characteristics will also include references to the relevant DMA provisions that could be applicable in mitigating the risk of economic crime linked to the identified characteristics.

6.1 Time pressure

During times of disaster, there is generally a need to move swiftly, primarily to save human lives, but also because of the fundraising and media pressure (Maxwell *et al.*, 2008, p. 8). According to Calossi *et al.* (2012, p. 662), the time pressure associated with emergency activities requires quick decision-making, based on incomplete information and limited procedural processes, which could increase the risk of corruption.

While the pressure for immediate assistance does not lead to corruption events on its own, it can result in the bypassing or disregard of normal controls and procedures that were designed to prevent corruption (Bailey *et al.*, 2012, p. 143). According to Fenner and Mahlstein (2009, p. 243), rules governing procurement, such as honest competition and transparency in contract allocation, can be circumvented. Many countries' procurement laws have an emergency exemption provision. Although the necessity for accelerated procedures is apparent, the likelihood of abuse increases when regular procurement processes are deviated from (Fenner and Mahlstein, 2009, p. 243).

In South Africa, sections 27, 41 and 55 of the DMA (57 of 2002) authorise the Minister, Premier of the province or municipal council to declare a national state of disaster to provide quick assistance to those affected and to promote restoration efforts in affected areas. As discussed above, the inherent time pressure associated with declaring a state of disaster could however increase the risk of economic crime.

The NDMF seems to recognise the risk associated with time pressure by requiring organs of state to set aside funds for disaster response and recovery costs and only after the funds have been depleted, can the respective government entity seek financial support from the national government. Financial assistance will also only be granted if preventative measures were implemented and the Minister may determine a threshold for obtaining payments from the central contingency fund (Minister for Provincial and Local Government, 2005, p. 103).

To permit the quick release of funds while still ensuring that proper controls are in place, the DMA stipulates that the right to authorise the release of emergency funds from the contingency fund lies with the Minister and that this power cannot be delegated (Minister for Provincial and Local Government, 2005, p. 105). Furthermore, National Treasury may, upon the request of the Head of the NDMC, authorise the release of a certain percentage from the National Revenue Fund in the event of a national disaster (Minister for Provincial and Local Government, 2005, p. 105). By introducing the principle of "self-funding", as a pre-requisite before accessing national funds and implementing authorisation measures before fund allocation, the NDMF attempts to ensure that funds aren't allocated haphazardly due to the time pressure associated with post-disaster circumstances.

Furthermore, the Head of the NDMC will also be responsible for the use of these funds and will be accountable to the Minister, who is in turn accountable to Parliament. The PDMC's head may follow a similar process and will be accountable to the MEC (Minister for Provincial and Local Government, 2005, p. 105). Although post-disaster circumstances necessitate emergency procurement processes due to time constraints, the NDMF proactively attempts to enhance proper oversight mechanisms and establish various reporting channels, thereby aiming towards transparency and accountability in the process.

6.2 Substantial inflow of money, goods and services

Disasters result in a large influx of humanitarian aid from other countries which can result in higher levels of corruption and the mismanagement or diversion of funds (Fenner and Mahlstein, 2009, p. 243; Zafar *et al.*, 2023, p. 3). According to Fenner and Mahlstein (2009, p. 243), the substantial amount of money involved can be an enticement for individuals and entities who have access to it and makes them believe that misappropriation of funds will be less detectable if more money is involved. As a result, there may be less deterrence to engage in corrupt practices, while the money that can be generated from corruption is multiplied (Fenner and Mahlstein, 2009, p. 243).

Disasters that necessitate humanitarian aid typically occur in environments with limited resources (Maxwell *et al.*, 2008, p. 9). Humanitarian assistance is a precious resource introduced into an atmosphere filled with personal needs and crucial survival challenges, and as a result, increases the possibility of the misappropriation of funds. Better accountability and transparency can help to reduce this risk related to the misappropriation of funds, or at the very least serve as a deterrence, but it does not resolve the underlying tension of adding foreign resources in a resource-poor, power-stressed environment (Maxwell *et al.*, 2008, p. 9).

In South Africa, Sections 27, 41 and 55 of the DMA (57 of 2002) authorise the national, provincial and local governments to enact new regulations and issue any directives once a state of disaster has been declared, which includes measures to promote international assistance. This relates to the risk associated with the substantial inflow of money, goods and services from outside the country discussed above.

The NDMC is however mandated to create avenues for communication with foreign disaster management agencies that fulfil the same functions as the National Centre, which will ultimately promote the exchange of information and provide access to international expertise and assistance (DMA 57 of 2002). Communication with international aid agencies can help to align disaster policies and guidelines, keep better track of the funds and strengthen ethical behaviour that discourages the risk of economic crime.

6.3 Inadequate needs assessment, large-scale reconstruction and involvement of contractors/suppliers

Fenner and Mahlstein (2009, p. 243) stated that the urgent desire for immediate assistance and large-scale reconstruction may result in an inadequate needs assessment. Needs assessments set the tone for subsequent humanitarian initiatives, determining what is delivered, where it is delivered and how much is delivered (Ewins *et al.*, 2006, p. 29). A lack of or substandard quality of such assessments creates opportunities for corruption through manipulating assessments (Ewins *et al.*, 2006, p. 29). Poor planning, over-supply or under-supply of aid or implementing unsuitable initiatives can result in potential exploitation and can also lead to the failure to comply with standard procedures which increases the risk of fraud and corruption (Bailey *et al.*, 2012, p. 143; Fenner and Mahlstein, 2009, p. 243). Success in the disaster relief industry is measured in part by having the capacity to respond swiftly and, more crucially, to be seen to respond swiftly, which could place pressure on institutions and individuals to falsify needs (Ewins *et al.*, 2006, p. 29).

The involvement of contractors and suppliers in the reconstruction phase may also pose a significant risk, since they may be enticed by the business prospects presented by the necessity for goods and services in the aftermath of a disaster (Fenner and Mahlstein, 2009, p. 245). Emergency procurement procedures create the opportunity to bypass controls that were implemented to prevent economic crime in the first place and it may be abused by corrupt suppliers and contractors. It can open doors to improperly obtaining contracts since the regular vetting process won't be followed. Furthermore, the large amount of funds involved in rehabilitation contracts can also encourage contractors to collude with authorities, which can result in subpar infrastructure, for example, by using materials of lower quality and cheaper costs than those planned for to keep the price difference (Fenner and Mahlstein, 2009, p. 245).

Sections 27, 41 and 55 of the DMA of South Africa stipulates that the additional directives that may be issued by the national, provincial and local governments during disasters may include emergency procurement procedures and the facilitation of post-disaster recovery and rehabilitation (DMA 57 of 2002).

In an attempt to prevent possible abuse related to these directives, the DMA (57 of 2002) stipulates that the government's powers may only be used to the extent required for offering assistance and protection, providing relief to those affected, protecting property and addressing the consequences of the disaster. Furthermore, the NDMF states that government entities should finance their rehabilitation and reconstruction costs through their own budgets until the specified threshold is reached. The next viable option available is to use conditional grants or reallocate funds within their capital budgets (Minister for Provincial and Local Government, 2005, p. 106). Using funds from the contingency reserve can be considered a final resort, only to be used when all other alternatives have been exhausted (Minister for Provincial and Local Government, 2005, p. 106).

Funds from the contingency fund, which will be allocated based on a matching principle, can however only be accessed if each reconstruction project is justified separately. The suggested ratio is 75:15 and helps to reduce the negative incentives related to national funds (Minister for Provincial and Local Government, 2005, p. 107). The above-mentioned provisions could restrict access to national funds and ensure that the emergency procurement process and needs assessment are properly justified, before any fund allocation takes place, which could ultimately decrease the risk of economic crime.

6.4 Power imbalance between recipients and relief organisations/governments

According to Bailey *et al.* (2012, p. 143), disasters tend to occur in political environments in which the combination of ineffective systems, the influx of external resources and rapidly changing power relations generates the potential for the diversion of aid intended for individuals in need. There is generally an unequal power relationship between the recipients of the funds and the relief organisations and donors, who act mostly to their own accord (Fenner and Mahlstein, 2009, p. 243).

Humanitarian assistance is essentially a one-sided resource transfer in which the beneficiaries have very limited sanctioning capabilities, which can lead to an increased risk for corruption (Calossi *et al.*, 2012, p. 663; Fenner and Mahlstein, 2009, p. 243). This could result, for example, in recipients paying bribes to local authorities to be placed on the list of beneficiaries or local governments demanding bribes to be included (Ewins *et al.*, 2006, p. 49).

Section 16 of the DMA (57 of 2002) places the responsibility on the NDMC to oversee whether disaster management role-players adhere to the provisions of the DMA and the

NDMF as well as to monitor their post-disaster recovery efforts. The NDMC attempts to ensure that each structure fulfils its responsibilities and functions and that funding is utilised and allocated as intended by the DMA in an attempt to prevent the misuse and abuse of power. Adequate oversight and accountability should, in theory, discourage corrupt officials from abusing their position of authority by increasing the risk of detection, which could contribute to ensuring the integrity of the post-disaster funding system.

6.5 Responsibility of governments and conflicted interests

According to Yamamura (2014, p. 386), the government usually assumes responsibility for reconstruction and restoration efforts and the allocation of funds for these purposes. The fact that the government plays such a major role in the collection, coordination and distribution of aid, increases the risk of corruption because it can lead to a misuse of funds if there is a lack of transparency and accountability (Fenner and Mahlstein, 2009, p. 244; Zafar *et al.*, 2023, p. 2).

Emergency situations mainly concern survival and one of the most prevalent types of corruption is nepotism and favouritism; choosing family, friends or members of the same group for positions and contracts based on personal relationships rather than competence (Maxwell *et al.*, 2008, p. 9). Because government officials are in a position of authority, the relevant government can take advantage of the situation to ensure that relief efforts benefit them or their friends and family (Willitts-King and Harvey, 2005, p. 23).

The DMA requires in terms of Chapters 3, 4 and 5 of the DMA (57 of 2002) the creation of Disaster Management Frameworks, Disaster Management Advisory Forums, Disaster Management Centres and Inter-governmental Committees on Disaster Management on the national, provincial and municipal levels of government to delegate functions and to foster an integrated and coordinated strategy to disaster risk management. These parties also provide oversight to mitigate conflicted interests. The decentralisation of responsibilities can be employed to reduce the risk of economic crime and increase transparency and accountability. This method could mitigate the risk that no single individual can be wholly responsible for the allocation of post-disaster funding and prevent them from utilising the funds arbitrarily by allocating responsibilities and providing additional oversight.

7. Conclusion

Economic crime in post-disaster funding can have various negative consequences including the misappropriation of funds, deviation of supplies, inadequate reconstruction efforts and even the loss of life. Past occurrences have demonstrated that even in the face of South African disasters, thoughts immediately turn to economic crime and how corrupt parties would strive to capitalise on the situation.

This paper identifies characteristics of post-disaster funding that make it susceptible to the risk of economic crime and analyses how the different statutory and regulatory disaster risk management instruments of South Africa aim to manage post-disaster events.

Post-disaster circumstances possess certain inherent characteristics that make it susceptible to the risk of economic crime. These characteristics include time pressure; substantial inflow of money, goods and services; inadequate needs assessment; large-scale reconstruction and the involvement of contractors or suppliers; power imbalance; and the responsibility of governments.

To manage the funds allocated to post-disaster circumstances, the DMA and NDMF mandate the creation of various structures to delegate responsibilities and enhance oversight. This framework also creates communication channels to ensure transparency, reporting lines to facilitate accountability, and specified funding procedures to prevent the misuse of national funds.

Even though South Africa is known to have some of the best disaster risk management legislation and policies, the pervasive nature of these post-disaster funding characteristics could still render post-disaster funding structures susceptible to the risk of economic crime.

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