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**Financialization and human rights abuses provoked by  
business:  
the case of Samarco disaster in Brazil**

*by*

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Dissertation, 30 higher education credits

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Spring 2017

## **Declaration Form**

The work I have submitted is my own effort. I certify that all the material in the Dissertation, which is not my own work, has been identified and acknowledged. No materials are included for which a degree has been previously conferred upon me.

*Rebeca Borges Machado Azevedo Leitão.*

*Date: 26 May 2016.*

## **Acknowledgements**

The friendships found in these two years are too precious to summarise.

I hope that everyone who opened me a door, made my day easier, gave me a hand of advice - even from Atlantic distances -, made me laugh and enjoy my time, would receive my most sincere *Obrigada*.

In special, I thank my teachers and my supervisor for your attention and shared knowledge.

I thank my family for supporting my dreams, and I thank my Swedish family for your care and love.

Lastly, my respect for all women that has struggled so I could be here today.

*I*

*O Rio? É doce.*

*A Vale? Amarga.*

*Ai, antes fosse*

*Mais leve a carga.*

*II*

*Entre estatais*

*E multinacionais,*

*Quantos ais!*

*III*

*A dívida interna.*

*A dívida externa*

*A dívida eterna.*

*IV*

*Quantas toneladas exportamos*

*De ferro?*

*Quantas lágrimas disfarçamos*

*Sem berro?*

Lira Itabirana, Carlos Drummond de Andrade, 1984.

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# Abstract

The aim of this study is to explore the implications of the financialization process on human rights compliance by business, based on an analysis of the Samarco case, in Brazil. In 2015, Samarco Company's tailing dam collapsed and killed people, destroyed the surroundings and polluted 650 km of a river basin's waters. The legal approaches on business and human rights do not offer tools for investigating the social conditions that allow such disasters to take place. It was appropriate an exploratory study of Samarco's context, and the lenses chosen were the Financialization Theory and Tony Evans' definition of market discipline. The method was the single case study, with analytical procedures of Content Analysis and indirect measurement. Categories were created from the theory and also emerged from the data. I analysed sampled documents and identified narratives that allowed inferences about Samarco's corporate decisions. The results revealed that Samarco is recently involved in the financialization process by at least two means – its shareholders and its market, so a financial-friendly behaviour was expected. The narratives of the company's Reports revealed practices guided by the shareholder value maximisation and the increase of concerns with financial risks. The strategies adopted were, among others, austerity measures and expansion, which resulted in great benefits for the shareholders. Such practices were hazardous for the protection of workers and communities because it entailed an increase in collective risks, such as by decreasing the budget for the dam's maintenance. In different moments, the shareholder value and related practices were identified as the source of power determining the Company's narratives and actions. In this context, the voluntary human rights instruments were insufficient and inappropriate and legally-binding instruments towards business remain necessary in the legal sphere. Moreover, a politicised, critical human rights discourse could offer a counter-narrative in organisations and society.

**Key words: shareholder value, market discipline, mining industry, legally-binding instrument, Mariana**

**Word count: 16799**

# List of acronyms and abbreviations

**AGU** – *Advocacia Geral da União* (Brazil’s Federal Attorney’s Office)

**AGE** – *Advocacia Geral do Estado* (a Brazilian state Attorney’s Office)

**BCO** – Brazilian Civil Organizations

**DIHR** – The Danish Institute for Human Rights

**FTDII** – The *Fundão* Tailings Dam Independent Investigation

**IACmHR** – Interamerican Commission on Human Rights

**IACtHR** – Interamerican Court of Human Rights

**IFHR** – International Federation for Human Rights

**IGWG** – Intergovernmental working group with the mandate to elaborate an international legally binding instrument on Transnational Corporations and Other Business Enterprises with Respect to Human Rights (at the United Nations)

**ILO** – International Labour Organisation

**MAB** – *Movimento dos Atingidos por Barragens* (The Movement of People Affected by Dams, Brazil)

**MPF** – *Ministério Público Federal* (Federal Office of the Prosecutor)

**MPMG** – *Ministério Público do Estado de Minas Gerais* (States’ Office of the Prosecutor)

**PoEMAS** – *Grupo Política, Economia, Mineração, Ambiente e Sociedade* (Research group Politics, Economics, Mining, Environment and Society)

**UN** – United Nations



# Chapter 1: Introduction

## 1.1 Background: the Samarco socio-environmental disaster and human rights abuses

In 2015 Brazil underwent the worst<sup>1</sup> environmental disaster in its history (UN, 2015, p.10). A mining tailing dam<sup>2</sup> collapsed and poured approximately 40 million cubic meters of mining waste, which were composed of mud, water and chemical substances. This amount is the equivalent of 20,000 Olympic swimming pools of reject (Tuncak 2017, p.157). It devastated the area around the dam, it swept over two whole villages, destroying 90% of its properties. The mud killed 19 people among workers and residents of the city, left many people injured (MPF 2016, p.57) and killed all animals in the valley.

Once in the valley, the mud reached the largest river basin in the region, contaminating its waters along 650 km. It inundated 41 cities alongside the basin's rivers, destroying public and private properties (Tuncak 2017, p.157) and affecting 220 municipalities in total. For illustrative purposes: this extension is more than the distance between Oslo (Norway) and Stockholm (Sweden), crossing the Swedish territory from one side to the other.

The contamination killed and still kills fishes, fauna and flora; left entire cities without water for several days; the economic activities related to the rivers had to stop immediately, including fisheries and agriculture. At least three indigenous people's territories were affected, besides protected traditional communities such as *quilombolas* (MPF, 2016b, p.74).

The mud crossed two federal states through the river and reached the sea, polluting preservation areas and beaches (UN, 2015, p.10). In total, it is calculated that between 2,3 million and 3,2 million people who rely on the river and sea ecosystems had their livelihoods affected (Brazilian Civil Organisations, 2016, p.29; Tuncak 2017, p.158).

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<sup>1</sup> "This is the largest disaster in mining history in at least three aspects: the amount of mud poured (50 million of cubic meters), the long pathway of the mud (more than 600 kilometres) and the estimated cost of the losses, currently calculated in 30 billion of Reais"; original in Portuguese: "Trata-se do maior desastre do gênero na história da mineração sob pelo menos três aspectos: o volume de lama despejado (mais de 50 milhões de metros cúbicos), o trajeto percorrido pela lama (mais de 600 km) e o valor (estimado) dos prejuízos causados, que são calculados atualmente na ordem dos R\$ 30 bi" (Brazilian Civil Organisations, 2016, p.29).

<sup>2</sup> Tailing dam is an engineering construction used to store waste/by-products of mining operations.

With regards to public transparency and information, the case is also subject of criticism. Samarco, the responsible company (also the Company hereafter), did not have an emergency plan of evacuation to protect the communities around the tailing dam. Information was kept from the public by authorities and by Samarco, such as other dams being in imminent risk of collapse, the nature of the rejects and the quality of the waters after contamination (Brazilian Civil Organisations, 2016, p.31; Tuncak 2017, p.158).

The losses for individuals, environment and society are inestimable. Scientists calculate that it will take around 20 years for the basin to recover (AGU, 2015), while there is a strong suspicion that irreversible damage occurred (Tuncak, 2017, p.158, Brazilian Civil Organisations, 2016, p.28).

In this scenario, there are several human rights abuses and violations to consider, both individual and collective (MPMG 2015:1). To name a few, the breach of the right to life, health and family, the right to property, housing, the right to work, the right to water and healthy environment and the right to participate in public affairs (Brazilian Civil Organisations, 2016, p.30).

Although the Brazilian state is the human rights duty bearer, there are no legally binding instruments that would trigger an accountability mechanism towards Samarco and its shareholders. This is what the literature calls *accountability gap* on business and human rights and currently, the outstanding approach to this gap is voluntary; the development of binding instruments is being advocated (Blitt, 2012; Kanalan, 2016, p.19; DIHR, 2016, p.33).

Nevertheless, none of these initiatives addresses the socially-constructed conditions that encourages harmful practices to be performed by businesses. In this scenario, Tony Evans offers a substantial critique of human rights legal discourses through the concept of discipline, introducing the discussion of the market discipline's power over human rights<sup>3</sup>. The market discipline would establish a set of values and beliefs that, among other things, narrows organisational behaviour into market-friendly practices, even when against the human rights law.

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<sup>3</sup> Tony Evans definition of market discipline differs from the academic subject Market Discipline. Tony Evans uses the term "market discipline" as a theoretical concept building upon "discipline" and "governmentality" in Foucault and the "hegemony" in Gramsci. While the Market Discipline as an academic subject is a particular set of studies concerning the transparency of loans and liability of borrowers, which is not directly related to the discussion herein.

The Prosecutors of the case considered that Samarco disaster was caused by insufficient maintenance of the tailing dam<sup>4</sup>, which risk assessments “*were consciously manipulated in order to reduce costs and increase dividends*” (MPF 2016, p12)<sup>5</sup>, while the Brazilian Research Group PoEMAS (2015, p.15) indicates the iron commodities market cycles as a relevant factor for such austerity measures. Accordingly, the U.N. Special Rapporteur on Human Rights and Hazardous Substances and Wastes affirms: “Certainly, events before and during the [Samarco] disaster illustrate many lessons for human rights due diligence and impact assessments, as well as the *role of the financial sector*” (Tuncak 2017, p.6). Thus, different actors point out the relevance of a financial “something” as providing conditions for the disaster’s occurrence. But these claims appear in a scattered manner, with roles and actors not explicitly specified.

Thus, I turned to the Financialization Theory to explore Samarco’s business context. This emerging scholarship investigates the financialization process of the capitalist system, which “refers to the increasing importance of financial markets, financial motives, financial institutions, and financial elites in the operation of the economy” (Epstein, 2002, p.1). The present essay investigates the connection between the financialization process and the human rights abuses consequence of the Samarco tailing dam collapse to understand whether financialization is relevant for the human rights field.

## 1.2 Problem statement

The critique offered by Tony Evans calls for a contextual investigation of human rights abuses provoked by business. In the Samarco case, different actors point to the role of a financial “something” – sector, shareholders, markets - in this disaster, but there is no comprehensive analysis systematizing what this “something” consists of and what it entails. Moreover, there is no study exploring its relevance to the human rights abuses consequence of the case.

While the Financialization Theory scholars examine how changes in capitalism are systematically affecting social or workers’ rights; the **problem** emerging from the present case is: could the financialization process be also a significant contributor to **systematic corporate**

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<sup>4</sup> In August 2016, an independent investigation was published, by the requirement of BHP Billiton and Vale SA, Samarco’s shareholders. It concluded that the technical reason for the failure was the interaction of two types of tailing due to the over-accumulation of tailings in the dam (FTDII, 2016).

<sup>5</sup> Original in Portuguese: “Todos aqueles que perderam suas vidas não imaginavam que estavam no caminho da lama e dos rejeitos após rompimento de uma barragem cujos erros técnicos de implementação e manutenção foram conscientemente manipulados para reduzir custos e aumentar dividendos” (MPF 2016, p.12).

**negligence on human rights obligations**, as claimed by social movements and authorities involved in the Samarco disaster?

### **1.3 Aim and research questions**

The aim of this study is to explore the implications of the financialization process on human rights compliance by business, based on an analysis of the Samarco case.

The theoretical approach taken will be that of Tony Evan's critique of the conflicting relation between the market discipline and human rights, in combination with the Financialization Theory.

I will be answering two research questions, an empirical and a theoretical one, as follows:

1. How is Samarco involved in the financialization process?
2. What are the characteristics of Samarco's corporate behaviour and in what ways does it relate to the tension between human rights discourses and the market discipline?

The unit of analysis is the business company *Samarco Mineração SA*. and the delimitation is the disaster that occurred at the Samarco's *Germano* dam complex in *Mariana*, Brazil, on 5<sup>th</sup> November 2015 (Samarco, 2017, p.3) The methodology and methods are described in depth in Chapter 3.

### **1.4 Relevance of the study**

The present research is placed among two interdisciplinary areas of studies. While unpacking the financial-economic dynamics in which the Company operates, this study contributes to the human rights research and practice because it exposes contextual factors in which human rights abuses provoked by business actors are performed. This essay argues that these factors cannot be underestimated in academic or political inquiries about human rights compliance. Likewise, a better identification of contextual elements enables more accurate actions towards preventing this type of disaster from occurring. It also offers input to the studies on Financialization Theory, suggesting a human rights perspective and considerations to this interdisciplinary field.

### **1.5 Dissertation outline**

To answer the research questions, I will first engage in the literature review on business and human rights, presenting the development of the field in Chapter 2. In Chapter 3, I introduce Tony Evans' critique in combination with the Financialization Theory, forming the theoretical

approach. In Chapter 4, I present the research design and methods, ethical considerations and limitations of the study. In Chapter 5, I present the findings of the financialization of Samarco, and in Chapter 6, I discuss the relevance of this process for Samarco's compliance with human rights. Conclusions and recommendations will follow in Chapter 7.

## **Chapter 2: Literature Review**

Historically, there has been a process of expansion of Human Rights' recognition and protection, and that implies the inclusion of new actors as human rights duty bearers as well as in the development of liability measures and accountability mechanisms. In this Chapter, I revise the development of the leading human rights standards for business at the international sphere. I then consider a gap in the literature that justifies the adoption of the theoretical approach in Chapter 3 in this study.

### **2.1 Business and Human Rights debates at the international level**

The UN Universal Declaration of Human Rights of 1948 states in its preamble that “every individual and every organ of society” shall strive to respect, promote and give universal recognition and effectiveness to the human rights and freedoms. The acknowledgement of the role corporations and other businesses actors play on human rights effectiveness has been one of the most significant developments in the human rights debate. The traditional identification of States as sole human rights violator gave place to the premise that corporations, as powerful actors, should contribute to the promotion and protection of human rights as well (Sepulveda, Banning & van Genugten, 2004, p.478).

There is an increasing concern with the rights of those directly affected by businesses' activities: workers and impacted communities. Abuses range from civil and political rights to the social rights to health, food, shelter and labour, to collective rights such as environmental and the right to development. Moreover, corporations are increasingly being publicly blamed and shamed on tax avoidance and fraud. Ultimately, companies appeal to international agreements to hinder protective measures taken by States, affecting national economies and undermining the power of states to fulfil economic and social rights (UN, 2017, p.8; Balakrishnan, 2016).

In extractive industries, common abuses perpetrated by business regard labour, with the exploitation of slavery-like conditions or child labour; involvement in corruption or alignment with powerful groups in conflict areas; extensive environmental degradation, with impacts on health and livelihoods and indigenous populations; and the use of extreme violence by “security forces” (Muchlinski, 2009, p.127). Some affected people are right holders in a direct relation with the business, such as employees or displaced people. But certain abuses impact collective

or diffuse rights<sup>6</sup>, affecting whole societies, e.g., due to waters and air pollution. Nonetheless, there is still a significant gap on businesses liability to human rights; their responsibilities are disproportionately small in relation to their capacity of global and regional influence (UN 2017, p.5; De Schutter, 2016, p.6).

In response to this gap, efforts have been made to advance the definitions of business responsibilities and to create systems of monitoring, accountability and remedy<sup>7</sup>. The attempts are spread among different sectors and organisations, such as international criminal law, labour (Tripartite Declaration of the ILO); finances (IFC Performance Standards, the Equator Principles); the OECD Guidelines for Multinational Enterprises, and movements at the UN and at regional levels. Despite their variety, it is possible to pinpoint two main approaches taken in the international debate on business and human rights: certain initiatives take the road of voluntary policies while other initiatives urge for the creation of legally binding standards applicable to businesses.

## **2.2 Voluntary approaches on Business and Human Rights**

In 2000, the Global Compact initiative was launched by the UN. Corporations participants in the Global Compact adhere to ten principles, which are derived from the Universal Declaration of Human Rights, the ILO's Declaration on Rights at Work, the Rio Declaration on Environment and Development, and the United Nations Convention Against Corruption:

The process is voluntary. It is based on the idea that good practices should be rewarded by being publicised, and that they should be shared in order to promote a mutual learning among businesses. The companies acceding to the Global Compact are to 'embrace, support and enact, within their sphere of influence', the principles on which it is based, and they are to report annually on the initiatives they have taken to make those principles part of their operations.

(De Schutter, 2016, p.7).

Today, it is considered the largest corporate responsibility initiative in the world, but since there is almost no control over the actions taken by companies to pursue such principles, the initiative

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<sup>6</sup> Collective rights refer to the rights of a specific collectivity – a group – while diffuse rights relate to unspecified people who are connected by an event (such as a disaster).

<sup>7</sup> Efforts at the UN level recall for at least 40 years of struggles (UN, 2017, p.4).

has been criticised by offering green-washing| blue-washing marketing tools (IFHR, 2016, p.539-541).

Between 1997 and 2003 the struggle for binding norms increased with the draft of the UN Norms on the Responsibilities of Transnational Corporations and Other Business Enterprises with Regard to Human Rights (the Draft) by the Working Group on the Working Methods and Activities of Transnational Corporations (1997). However, the Draft was rejected in 2004 with no clear explanation (Mantilla, 2009, p.287, De Shutter, 2016, p.7).

Following the rejection, the UN constituted a special representative to conduct researches and develop regulatory proposals in 2005. In 2008, it was approved the “Protect, Respect and Remedy” Framework and in 2011 the UN endorsed the “Guiding Principles on Business and Human Rights: Implementing the United Nations ‘Protect, Respect and Remedy’ Framework” (Guiding Principles). The Guiding Principles are the most outstanding international framework for human rights in the international arena, being used to base capacity building initiatives and incorporated into guidelines such as the International Financial Corporation Performance Standards and the OECD Guidelines for Multinational Enterprises (DIHR, 2016, p.16).

Through three core principles, the Guiding Principles reinforce the *duty of States* in promoting human rights and their responsibility for ruling the violations and seeking for remedies. Business organisations, on the other hand, have the *duty to respect* recognised international human rights. The commentaries to the Guiding Principles specify this obligation into the responsibility of actively “addressing adverse human rights impacts, (...) [by] taking adequate measures for their prevention, mitigation and, where appropriate, remediation” (UN, 2011, p.14). Therefore, the fundamental element of implementation of the Guiding Principles’ obligations on companies is the voluntary performance of due diligence (Principles 15, 17), by means of a Human Rights Impact Assessment (DIHR, 2016, p.16). The operational principles are summarised in the steps of adopting a policy that recognizes human rights international standards; assessing human rights impact caused by the business activity; integrating human rights into the business operations and, finally, measuring and reporting the performance of mitigating actions; with specificities for the creation of a grievance mechanism for right-holders. When abuse occurs, the business is compelled to perform remediation actions (UN, 2011, p.24). Additionally, there exists a requirement for states to create national action plans, although this requirement is not obligatory to the states, as the preamble of the Guiding



Principle (UN, 2011) makes clear: “Nothing in these Guiding Principles should be read as creating new international law obligations”.

Although most measures taken under such approaches are voluntary, they can be converted into legally binding obligations, specifically through private contracts or other private commitment instruments (Kanalán, 2016, p.23). Defenders of voluntary approaches argue that it is States’ responsibility to regulate businesses’ activities (Kinley, 2009, p.159). Relevant initiatives claim for specified obligations on States regarding corporate control, further liabilities on TNC’s home States and the duty of mutual assistance between countries (De Schutter 2015).

All in all, for its completeness, the Guiding Principles seem sufficient to provide means for business’ compliance with human rights. However, it is impossible to ignore that there is no mechanism for enforcement, there is no sanction for companies that do not comply, and there is no control over the self-assessment companies do (Kanalán, 2016, p.22). The common characteristic of voluntary initiatives is that they focus on the promotion of good practices but not on accountability or redress mechanisms (Ortega, 2008, p.278) therefore, they cannot be considered sufficient measures for human rights protection; binding instruments are still necessary.

## **2.3 Binding instruments towards corporations**

Campaigns for legally binding instruments are pertinent in the international arena, and they argue that voluntary approaches should only be complementary measures. The main claim is for the recognition of direct human rights obligations on corporations and creation of mechanisms for monitoring and enforcement (De Schutter, 2015).

In 2014, the UN Human Rights Council adopted a resolution that (re)established an open-ended Intergovernmental Working Group with the mandate to elaborate an international legally binding instrument on Transnational Corporations and Other Business Enterprises with Respect to Human Rights (IGWG). Until the issue of this essay, two sessions of this working group have taken place, the first in 2015 and the second in 2016. During the debates, many concerns were raised by the stakeholders, among others, the implementation of international mechanisms for control of due diligence via an International Tribunal on Human Rights<sup>8</sup>; the necessity of a

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<sup>8</sup> This positioning defends the coverage of costs to come from taxes paid by TNCs (UN, 2017, p.6-7).

human rights instrument affirming its prevalence over the commercial and corporate law, and the like (UN, 2017, p.8).

It is also worth noting that companies are subject to the Humanitarian and Criminal International Law (DIHR, 2016, p.33). The International Criminal Court was established in 2002 by the Rome Statute, and it is entitled to prosecute individuals involved in genocide, crimes against the humanity, war crimes and the crime of aggression. Corporate executives can be brought to justice for these crimes, as individuals. There are aspirations for the inclusion of legal persons in the jurisdiction of the Court, that is, to make corporations accountable to the Rome Statute. However, the Court jurisdiction's gravity requirements do not allow for most human rights abuses to be prosecuted (Scheffer, 2016).

In sum, it is possible to identify a negotiation course, in which different actors contribute and dispute the development of the set (or absence) of rules, with progress towards improved accountability to business (Graetz and Franks, 2013, p.99; De Schutter 2016, p.5). The literature is mainly concerned with legal aspects and with the improvement of the international law (Evans, 2007, p.110), which is valid and necessary. However, there is no linear progress, no guarantee that the discussions of the Working Group will render a treaty – like the Draft Norms did not. Moreover, the existence of a treaty and accountability mechanisms have limited efficacy as they cannot address causes but only offer redress. In this sense, both voluntary and mandatory approaches seek to condemn specific individuals as human rights abusers and compensate the victims, without considering why there were a possibility and interest for the abuse in the first place<sup>9</sup>.

To uncover favourable conditions for abuses, it is necessary to look at the business context and the competing interests for their compliance with human rights (Evans, 2007, p.11). This contextualization comes from different academic fields, such as organisational theory and anthropology (Sarfaty, 2009), feminist theory (Balakrishnan et al., 2016b), etc. Recalling the claims over the influence of the financial sector by different actors on this case, the present research will consider the global economy context through the interdisciplinary scholarship of Financialization Theory.

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<sup>9</sup> The use of approaches that go beyond legal analysis of human rights violations are necessary to provide meaningful and lasting progress on the development of the human rights framework. Without addressing power, one cannot meaningfully address change (Tony, 2007, p.110).

The next Chapter exposes the critique on human rights legal discourses and explores what is called the financialization process of capitalism, building up the theoretical framework for the analysis of Samarco's case.

## **Chapter 3: Theoretical approach**

### **3.1 Market discipline and Human Rights discourses**

Tony Evans (2005, 2007) presents a substantial critique of the literature, policies and practices of human rights, arguing that the context of the global economy has been widely overlooked in this field. His analysis builds on the concepts of discourse and discipline, relying strongly upon Gramsci and Foucault.

The author adopts the concept of 'discourse' as the use of language with the intention of promoting certain thoughts and beliefs which will guide the social construction of meanings and values. By providing sets of values, a discourse informs actions and, therefore, structures policies and practices (Evans, 2005, p.1049). As he finds the legal discourse on human rights dominant, while other discourses such as the political and philosophical, are marginalised, the question of power arises (Evans, 2007, p.109-111). Who are the beneficiaries of this dominant discourse?

In his critique, Evans (1998, 2005, 2007) exposes a tension between the dominant legal discourse on human rights – which manifests in the international human rights standards - and the dominant discipline of the global political economy – the market discipline.

The concept of discipline also entails the dominance of particular thoughts and behaviours, but differently from discourses, it results in a mode of social organisation that operates without coercion. Discipline is taught and learned in the daily life via education and other institutional training – work, church, etc. – imposing clear boundaries of acceptable and unacceptable behaviours (Evans, 2007, p.110). These boundaries are not based on what practices are more beneficial for the individual or the society, nor are they determined by legality; rather, the admissible behaviour is determined by power relations (Dobbin, 2005, p. 30; Evans, 2005, p.1054-1055). As a result, certain conducts are unquestionably accepted as normal, while others are disregarded or marginalised. Disciplines legitimate social action, even when the action breaches legal obligations (Evans, 2005, p. 1055). The disciplinary power is not exercised by specific institutions but through normative structures. These structures narrow the narratives that present the available options for one's decisions. Within the limited narratives, a subjects' behaviour is predictable (Evans, 2005, p.1056).

According to the author, market discipline is the most prominent discipline in the global order, and it holds a particular set of values and “truths” that are widely accepted. This set of truths implies that “profits for investors is the supreme human value, to which all else must be subordinated”, so that “human life has value as far as it contributes to this end” (Chomsky, 1994 *apud* Evans, 2007, 115). The market discipline champions neoliberal discourses, such as deregulation, the free market, privatisation and minimum government, economic growth and the like (Evans, 2007, p.115). These “truths” are manifested at national and international levels, in different areas of influence, including policies and norm creation, among which are human rights. Between the market discipline and human rights, there are moments of dominance/guidance and moments of resistance.

The market discipline acts as guidance when it promotes a prominent set of human rights, specifically those which sustain market-friendly discourses, and the broad spectrum of human rights is then limited in practice (Evans, 2007, p.115-118). The market discipline is, thus, “a guide for action that stands above the international human rights regime” (Evans, 2005, p.1062). Human rights are practiced *in light of* the market discipline, so the human rights discourses and the set of human rights norms that do not suit the market discipline are marginalised (Evans, 2005, p.1063). A certain set of human rights (namely economic, social and cultural rights) is disregarded as “less legal”, making it harder to identify abusive actions and violations. Like closing the debate, human rights abuses/violations are limited to those derived from law breaching. It creates the violation-victim-violator framework, while

the significance of social, political and economic structures in which action takes place is of only peripheral concern when attempting to explain violations or apportion blame. This is convenient for those who most benefit from existing social and economic practices, for it deflects attention from violations that are the cause of much human misery.

(Evans, 1998, p.17)

Political and economic structures sustained by the market discipline allow systematic violations to happen (Evans, 2005, p.1063, Evans, 1998, p.17). Certain violations are solved by the punishment of individuals; while other violations are not recognised as such because when the market discipline legitimates these structures, some violent and abusive practices are regarded as normal, accepted, or even expected behaviour (Evans, 2007, p.112).

But the author also identifies attempts to limit this guidance, that is, attempts offering resistance to the market discipline (Evans, 2007, p.117, Balakrishnan, 2016). They bring demands for

considerations on power structures, for expansion of the human rights liability to include new actors, for further development of the set of rights (Žižek, 2014, p.264), for change on political and economic relations and the like (Evans, 2007, p.5), bring human rights back to its transformational potential (Goodhart, 2008:190-191). This is not possible within the regulatory realm, it happens in the political sphere (Evans, 2007, p. 12). Politicising human rights is necessary to contradict the above dominance and make human rights a tool for emancipation, entailing the advocacy for other possible ways of acting and contra-hegemonic decisions and behaviours (Santos, 1997).

This tension between market discipline and human rights is useful to comprehend the business scenario. The narrowed narratives and actions influence economic actors:

Priority is given to the exigencies of market discipline rather than human rights, dignity and welfare. When critics accuse companies of engaging in activities that make them complicit in human rights violations, environmental degradation, and increasing incidents of ill health, corporate managers remain confident that “normal” business practices remain largely immune from punishment.

(Evans, 2005, p.1059).

Furthermore, while corporations have historically pressured to expand corporate rights, they have not pressured to expand human rights (Evans, 2005, p.1064). Hence, as economic and human rights actors, corporations can be seen as an instance in which the tension between market discipline and human rights discourses materialises. Nonetheless, while human rights standards are outlined, market discipline needs further definition. What would comprise the market discipline at the organisational level? I propose the link between the theoretical approach of Tony Evans and the theoretical body of the Financialization Theory for the analysis of this case. I consider that financialization appears relevant in at least two different forms: With its *discourses*, it is a manifestation of market discipline; while a *process*, it is an intensification of the market discipline prevalence over other social propositions, such as human rights discourses of resistance.

### **3.2 Financialization Theory and the financialization process of the capitalist system**

Financialization Theory is a scholarship that studies the process of financialization of the capitalist system, it "refers to the increasing importance of financial markets, financial motives,

financial institutions, and financial elites in the operation of the economy and its governing institutions, both at the national and international levels” (Epstein, 2002, p.1). To explain this body of research, van der Zwan (2014) categorise it roughly into three approaches: at a macro, micro and mezzo levels.

The first approach considers the financialization process as the intensification of the capitalist system of accumulation; focusing on the macroeconomic level, it examines the financialization of national economies. It links the political influence of financial elites and the regulation of economic policies towards a neoliberal agenda - measures such as trade deregulation, flexibilization of labour, small government, abandonment of full employment (Palley, 2007, p.21) and the spread of consumer credit culture; while also investigates the interest of states in creating financial markets. Macro level financialization is seen as a redistributive process that results in economic instability and directly and systematically creates income inequalities (Palley, 2007, p.4). Empirical research shows an increasing in financial elites’ wealth at the expense of stagnation of workers’ wages, losses of benefits and indebtedness; while economic analyses show that frequent crises and financial uncertainty are the logical results of a system (van der Zwan 2014:105): “The financialization thesis maintains that many of these factors [behind the stagnation of wages and the growth of income inequality] should be linked and interpreted as part of a new economic configuration that has been explicitly promoted by financial sector interests” (Palley, 2007, p.12).

The second approach is at a micro level, called the financialization of the everyday life. Different studies analyse how low-income and middle-class households were incorporated in financial markets through home mortgages and pension funds and other “mass-marketed” financial products. Due to technological and institutional developments, ordinary people were empowered with the financial knowledge, and the citizen became an investor (van der Zwan, 2014, p.111). These studies focus on the implications of the financialization for the individual, be it in terms of livelihood, identity, culture, and so on. Some authors consider it a democratisation of finances, others find that this process implies underlying discourses proposing individual responsibility for one’s financial security and management, and risk-taking to achieve it. Social security shifts from being provided by the welfare state, the employer or the savings account, to financial products that the individual must purchase to be

protected against the uncertainties of life (van der Zwan, 2014, p.111-112). The result is an increase of the authority of finances in the individual life cycle<sup>10</sup>.

Although connected, a third approach is more relevant for the Samarco's case analysis. Looking at productive sectors, or non-financial industries, scholars investigate to what extent the financialization process impacts their corporate behaviour; what are the characteristics of the financialization at the corporate level (Palley, 2014, p.4).

The financialization process “generally attributes trends in corporate behaviour to an increasing pursuit of finance (here meaning the accumulation and exchange of money and investment) for its own sake; rather than (as was historically the case) positioning finance more broadly as a support service for production and trade” (Kaisershot and Prout, 2015, p. 787). Financialization has become “an alternative way to accumulating wealth for industrial firms” (Akkemik and Özen, 2014, p.75). This shift happens precisely in non-financial firms which start to allocate capital towards financial practices thus transferring income from the real sector<sup>11</sup> to the financial sector. The financial sector provides financial services; it accounts for banks, investment funds, insurance companies and the like. This sector has its importance increased at the organisational level (Kaisershot and Prout, 2015, p. 787; Akkemik and Özen, 2014, p.72) and it is noticed an increase of the shareholder value maximisation strategies in a firm's behaviour, explained in the following topic.

### **3.3 Financialization at the corporate level and the maximization of the shareholder value**

The financialization of the firm<sup>12</sup> is a shift from the managerial capitalism into financial capitalism. In the managerial capitalism, managers had the vital role in deciding firms' strategies, while now firms' structural organisation is changing towards giving more decision power to investors and companies' strategies towards the maximisation of shareholders' wealth (de Miranda et al., 2017, p.4; Börsch, 2004, p.366; Palley, 2007, p.17). Shareholders increase their participation in the firm's strategic decisions, and business practices are adopted for

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<sup>10</sup> For further readings on the financialization of the life cycle, see van der Zwan, 2014.

<sup>11</sup> The real sector of the economy refers to the productive sector, such as agriculture, industries and services.

<sup>12</sup> There is still no consensus on this concept, but the characteristics presented in the literature are overlapping. For further reading on the financialization of corporations, refer to Stockhammer (2004); Boyer (2000); Aglietta (2000); Lazonick e O'Sullivan (2000), among others.



maximizing their profits: “What sets the financialized corporation apart from its industrial-age predecessor is that the financial gains from these operations are not reinvested in the firm’s productive facilities, but rather are distributed to shareholders” (van der Zwan, 2014, p.108).

The “shareholder value” is a theory of corporate performance proposed in the late 1970s and it urges that the shareholder should be prioritised over other constituents of the company during strategic decisions (Palley, 2007, p.17). It redefined the corporate efficiency to the “ability to maximise dividends and keep stock prices high” (van der Zwan, 2014, p.107; Aglietta, 2000, p.149). Accordingly, managers are disciplined through “shareholder activism” and educational indoctrination; and through incentives such as performance compensation based on high financial returns (Pearlstein, 2014, p. 9). Defenders claim that it is a merging of ownership and control since it coincides the interest of the managers with those of the shareholders (Palley, 2007, p.4).

Some practices characteristic of financialising firms is downsizing and restructuring processes, aiming at saving productive capital and reducing labour cost; raise of indebtedness; and an overall pursuit of short-term results (van der Zwan, 2014, p.108; Aglietta 2000).

Restructuring processes imply that the firms adopt new financial and patrimonial structures to better respond to market pressures and the shareholder value (Börsch, 2004, page 366). Downsizing limits capital to be invested in production, while increases the non-operational/financial investment (van der Zwan, 2014, p. 104)<sup>13</sup>. It is the opposite of the classic command “retain and invest” (de Miranda et al., 2017, p.4). There is a pressure for reducing labour cost through different practices, such as staff cuts, subcontracting, outsourcing, etc. Indebtedness is like a side effect – since the objective of the company is to generate immediate results, the long-term sustainability of the firm can also be set aside (Miranda et. al, 2017, p.4,5).

In a circle of cause and consequence, this increased power of the shareholders often implicates in pressure for higher financial returns and greater dividend payments, which in turn fuels the process of financialization of the firm (Borsh, 2004, p.366).

In the last decades, there was both exponential increase of shareholders returns and enrichment of managers in highest posts in different parts of the world. Authors claim that it happens to the

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<sup>13</sup> As revenues originated from financial sources are increased in importance so is the financiers’ influence on the strategic decisions.

expense of the workers' wages and gains – they need to work more hours and receive fewer benefits -, worse working conditions and job losses (van der Zwan, 2014, p.109). The outcomes of practices pursuing the maximization of the shareholder value have also raised concerns among the business community, being deemed as responsible for undermining corporate values, resulting in underinvestment, innovation stagnation, decline of workers' productivity and worse long-term results (Pearlstein, 2014, p.11, Yves, 2017).

Other authors state that the shareholder value does not bring any real novelty to the management theory, in which increasing revenue and profits have always been the goal and the source for measuring a firms' worth. Nonetheless, the shareholder value legitimises the predominance of the shareholder over other stakeholders, and the domination of the capital market ideology over an industrial approach (Aglietta, 2000, p.148). These practices “reduce corporate income available for other non-financial claimants” (Palley, 2007, p. 21), so a direct consequence of this financialized behaviour is a systematic pressure to reduce production costs and increase the business' negative social and environmental externalities.

The studies on the financialization of corporations suggest that this process is harmful independently of the paradigm adopted to look at businesses. When considering a Marxian approach to capitalism, the financialization of firms manifests the intensification of the capitalist system of exploitation and wealth accumulation, alienated from the production and the workers' reality (Gong, 2016, p.95). It increases the wealth inequalities and contributes to social instabilities. On the other hand, when considering a liberal economic approach, this process appears as a distortion of what the firm is supposed to be, when it detaches the gains from the production and lessens positive contributions businesses can give to society, through the provision of goods and services.

Critical literature sometimes refers to the shareholder value as a discourse construct (van der Zwan, 2014, p.108) that has become a behavioural norm, or a discipline, as it is pervaded into economic and business culture (Pearlstein, 2014, p. 9, 14). Taking Tony Evans' critique, the shareholder value can be considered a (i) discourse of financialization and a (ii) a manifestation of the market discipline, (iii) connecting the concepts of market discipline and the financialization of the firm.

### 3.4 Theoretical propositions

The relevant concepts introduced by this theoretical approach are discipline and market discipline, discourse, shareholder value and financialization, forming the theoretical propositions:

- (i) As a discourse, the shareholder value promotes certain thoughts and beliefs, which inform actions and structure practices (Evans, 2005, p.1049). The shareholder value is, therefore, part of a broader structure.
- (ii) The shareholder value is a discourse within the market discipline structure. Therefore, when it is found in narratives and practices, it represents a manifestation of the market discipline<sup>14</sup>.
- (iii) The financialization process entails in an empowered shareholder value, thus representing an intensification of the disciplinary power of the market discipline.

Thus, financialization is a consistent ongoing process, embedded with values and norms and requires particular practices from social actors, among which, businesses. Such requirements could be either in alignment with human rights norms, in contraposition, or both. Therefore,

- (iv) In being involved in the financialization process, Samarco might have its behaviour changed towards the shareholder value and related practices;
- (v) This changed behaviour could imply practices in accordance or at odds to stakeholders' human rights protection.

Another relevant concept is that of narrative, which will be further developed in the methodology.

The next Chapter presents the methodology with which the empirical case will be analysed.

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<sup>14</sup> It seems that, because of its powerful premises, the shareholder value happens to be confused as being a discipline in itself (Shipman, n/d, p. 1).

## Chapter 4: Methodology

In this Chapter, I present the methodological affiliation of my work, and I explain the methods chosen for data collection and analysis, reflecting on its trustworthiness. I also discuss the ethical implications of the study and its limitations.

### 4.1 Research design

This study adopts a critical realistic approach. Critical realism considers that there is a reality independent of our thinking which science can investigate, but also that “all observations are theory-laden, and scientists (...) are inherently biased by their cultural experiences, worldviews, and so on” (Trochim, 2006<sup>15</sup>). The dialogue between subjective interpretations is what allows scientific development.

That said, the methodological choice of this project is a qualitative empirical research, agreeing with the theoretical body<sup>16</sup>, and adequate to analyse the disaster, the object of study. Empirical research can confront the theories with the resistant facts of the reality, challenge the theoretical propositions, and from this intersection, produce new knowledge (Braga 2011, p.5-8).

The qualitative exploratory single case study was chosen as the method, for it seeks a contextualised understanding of a phenomenon (Marshall and Rossman, 2016, p.19) and is appropriate to confirm, challenge or extend a theory. The selected Samarco’s case represents a critical case in relation to a theory (Yin 2009, p.47): it is critical to explore the Theoretical Propositions presented in Chapter 3.

Samarco is considered a socially responsible company in voluntary standards. It has received prizes for corporate responsibility, at the same time having provoked the worse environmental disaster in Brazil’s history, affecting the human rights of millions of people. Samarco’s shareholders are the largest mining transnational corporations in the world, and since Samarco products are commodities, its operations are linked to global finances. There are claims that the primary beneficiary of Samarco’s operations is the financial sector (Tuncak, 2017; MPF 2016:12; BCO, 2016), linking the financial sector to the human rights violations. Hence, it was

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<sup>15</sup> Trochim’s work is a web book that does not have pages.

<sup>16</sup> Both the financialization theory and human rights are interdisciplinary studies that present all types of methodological approaches, both qualitative or quantitative.

via the contact with actors' claims on *this* case that I decided to investigate the relation between the financialization and human rights, resulting in no other case to guide me in this endeavour. Thus, there was no population for selection. With regards to the delimitation of the study, the unit of analysis is the organisation responsible for the accident, *Samarco Mineração* (Yin, 2014, p.29).

Furthermore, the case study requires five components: the questions, the unit of analysis, the theoretical propositions, the logic linking them and the data, and the criteria for analysis (Yin, 2014, p.29). The first three have been covered; I below present the last two, the logic and the criteria.

## 4.2 The logic linking the theoretical propositions and the data

Considering the theoretical propositions defined in Chapter 3 and the research questions, this research will explore Samarco's involvement in financialization and related behaviours, over the ten years before the disaster, to investigate the dynamics of the market discipline, financialization and human rights discourses in Samarco's context.

The exploration of institutional processes can be done by analysing *narratives* expressed in organisational communications, to "provide inferential access to social realities that are too complex to be accessible otherwise" (Krippendorff, 2013, p.72). Communicated narratives show the decisions made by the organisation, exposing the ideas that are taken for granted in the organisational context<sup>17</sup> (Ville-Pekka, 2011, p.178).

Therefore, this study relied on documents for evidence, which is also well suitable for investigating major events and provides information on context (Yin, 2009, p.103; Marshall and Rossman, 2016, p.169). In addition to Samarco's communicative measures, I also analysed

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<sup>17</sup> Dialoguing with the concept of discipline, the relevance of narratives is that they uncover how "*we grow into a world already constructed by others*, without knowing why things have become what they are. This lack of knowledge (...) leads to the belief that 'things are good this way because this is the way they have always been. This belief discourages, if not punishes, deviations from established patters. (...) Talk [narratives] that prevents people from realizing the roles they play in maintaining institutional practices is one target of content analyses of institutions" (Krippendorff, 2013, p.73).

law case documents, media sources and secondary sources of data. The list of data sources used is specified below.

### **4.2.1 Technique for data collection**

Documents were chosen by snowball sampling: after the contact with pre-data (convenience sampling), I built on insights and connections therefrom (Marshall and Rossman, 2016, p.113; Silva et al., 2009, p. 455). I first found the Complaint to the IACmHR (BCO, 2016) to understand the claimed human rights violations; which guided me towards national legal documents. These guided me to Samarco's communicative documents, which are interrelated among each other. The legal documents also led me to media and bibliographical research, necessary to understand the MPF's claims.

### **4.2.2 Data sources**

This list is presented in detail in Appendix 1. The selected source of data was:

#### **4.2.2.1 Primary data:**

##### **4.2.2.1.1 Corporate communicative documents:**

- Samarco's Sustainability Reports and Financial Statements<sup>18</sup> between 2005 and 2014. 10 of each, 20 in total<sup>19</sup>; they were the main source of data, used for collecting indirect data (description, numbers and measures) and Content Analysis (see Table 1 below).
- Vale SA and BHP Billiton Sustainability Reports of 2015 answer questions about Samarco's shareholders by indirect measures (see Table 1 below).
- Samarco, Vale and BHP Billiton official webpages for complementary descriptive information.

##### **4.2.2.1.2 Media:**

- It was necessary to engage in open research to assess the global iron market characteristics and its possible financialization. On Google Search and on the Super Search of Gothenburg University's databases, I searched the terms

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<sup>18</sup> Available on the websites of the *Samarco Mineração* and its shareholders, BHP Billiton Brasil and *Vale Mineração*.

<sup>19</sup> The delimitation of the period for the documents selection encompasses 2005, the year before the construction of the dam; and 2015, the year of its collapse (PoEMAS 2015, p.18 and 54). However, due to the dam collapse in 2015, the Company has not issued any Sustainability Report since 2014.

“financialization” AND/OR “iron ore”. I accessed articles from American Metal Market Journal, Reuters, Oxford Journal, Commodity Facts, Global Summit Project, Mining.com, The Australian, S&P Global Platts; *O Globo*. These articles revealed a substantial consensus about the iron market characteristics, so I considered the data saturated. These data were triangulated with bibliography (see below).

#### 4.2.2.1.3 National Legal Documents:

- 2016 Criminal charging sheet by the Brazil’s Federal Office of Prosecution (MPF). I engaged in Content Analysis of the MPF’s argumentation for Samarco’s liability in the disaster. It reveals information about the decision making over the years in relation to the workers and communities’ protection, complementing the data collected from the Reports. The charging sheet uses the Federal Police investigative findings as evidence, so I had access to internal documents’ content that I could not access otherwise; they account for budget planning and risk management strategies. This was the only legal document that rendered results for Content Analysis (see Table 1 below) because it is the only type of petition<sup>20</sup> that describes actions taken by the Company.
- 2016 Public Civil Action by the Federal Office of Prosecution, Civil and Environment and
- 2015 Public Civil Action from the Minas Gerais State Attorney Office; Espirito Santo State Attorney Office and Federal Attorney Office (AGMG, PGES and AGU). After document reviewing, I decided that there was no relevant data to be analysed.

#### 4.2.2.1.4 International Legal Document:

- Complaint to the Interamerican Court of Human Rights, by Brazilian Civil Organisations (2016). Used for triangulation of findings.

#### 4.2.2.2 Secondary data<sup>21</sup>

- It was necessary to employ a short bibliographical research to triangulate the media discussions on financialization of the iron ore market. I used the PHD thesis of Xun

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<sup>20</sup> Due to the legal principle of the burden of proof, the criminal charging sheet exposes the causal link between the authors and the crime. In civil procedures, there is the inversion of the burden of proof.

<sup>21</sup> This secondary literature is not a background section or literature review, it represents findings that helped to answer the research questions. For complete reference, see the Appendix 1.

Gong (2016) for its completeness and up-to-dateness. I also reviewed other studies to improve reliability. Since the bibliography revealed similar consensus, as the media, about the iron market characteristics, I considered the data sufficient – saturated - for the depth of analysis needed (Marshall and Rossman, 2016, p.229).

**Data management:** some of the documents are only available in Portuguese so that required my translation. The original quotes in Portuguese are exposed in footnotes any time a quote was translated. When the same document was available in English, I used the original in English.

### 4.3 Criteria and techniques for data analysis:

One technique used was Content Analysis<sup>22</sup> for data analysis, which according to Krippendorff (2013, p. 35), requires research questions, text sampling, the explicit context to be explored (as specified above, Samarco’s involvement in financialization and related behaviour over the ten years before the disaster), and analytical constructs that operationalize into steps what is known about the context. As an exploratory study, the analytical construct does not present any hypothesis; rather it has methodological questions. The research questions were unpacked into four methodological questions to be answered in four steps:

- 1) **i)** How is Samarco involved in the financialization process?
- 2) What are the characteristics of Samarco’s behaviour and in what ways do they relate to the tension between human rights discourses and the market discipline?
  - ii)** What is the human rights discourse manifested in the Samarco’s Reports?
  - iii)** What are the characteristics of Samarco’s behaviour?
  - iv)** How such characteristics and their results relate to the tension between human rights discourses and the market discipline in the organisation?

Diagram 1 illustrates the steps of the study; discoveries in each step were essential to engage in the next. Although presented in a linear way for didact purposes, qualitative research is non-linear, requiring constant re-analyses until theoretical sufficiency (Marshall and Rossman, 2016, p.65). The blue bows represent the process of building up the conclusion<sup>23</sup>. The analytical tools will be exposed in Table 1, hereafter.

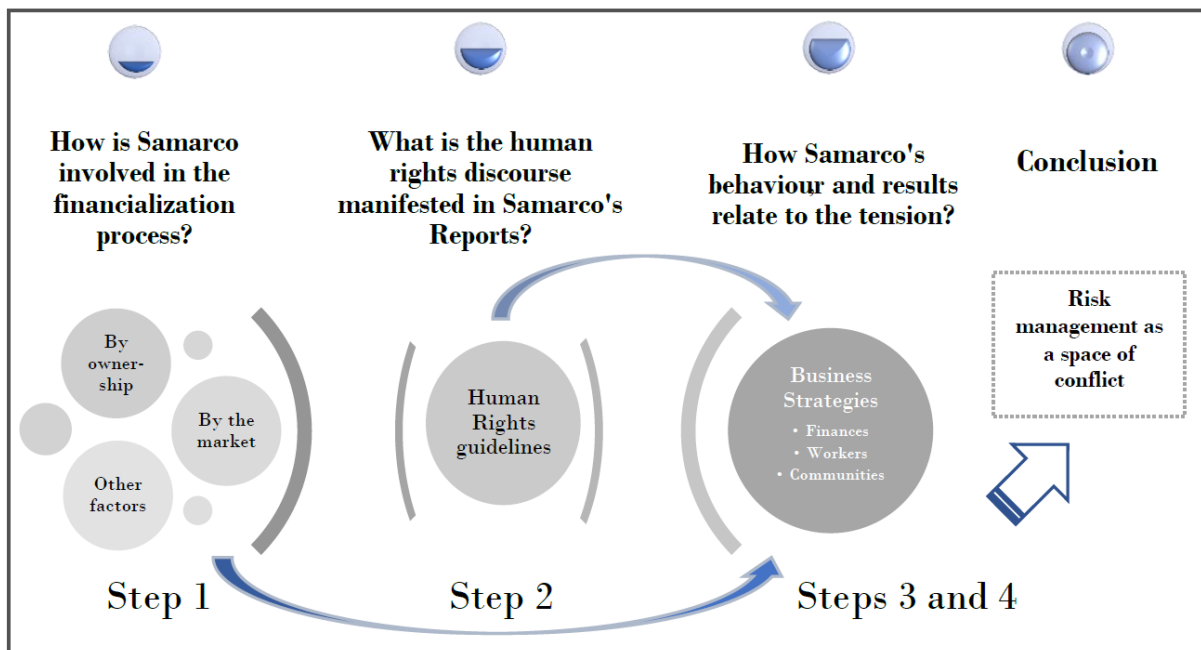
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<sup>22</sup> Content Analysis is a broad body of methodological studies. I used Krippendorff’s lessons (2013).

<sup>23</sup> An analogy in which the conclusion is being “filled up” in each step of the study.



Diagram 1 - Analytical construct and procedures



Author's original.

In complement to the Diagram 1, Table 1, presented below, shows the tools used for data analysis. The first column specifies the chapter in which each step is located and the second column refers to the steps and questions in Diagram 1.

Within the four steps, the method used in each step is specified; the theory-generated categories (Marshall and Rossman, 2016, p.219)<sup>24</sup> and the case study protocol of inquiry<sup>25</sup> guided the data collection/analysis (Yin, 2009, p.79). I also explicit the documents/source of data for each step in the last column:

<sup>24</sup> Further "in vivo categories", those that emerged from the data rather than pre-established by the theory (Marshall and Rossman, 2016, p.218), are presented with the findings in Chapter 6.

<sup>25</sup> See more about the tool of case study protocol in Yin, 2013, p.128.

TABLE 1) TOOLS FOR ANALYSIS

<i>Location</i>	<i>Step and Question</i>	<i>Categories</i>		<i>Case Study Protocol</i>	<i>Technique</i>	<i>Document</i>
<i>Chapter 5</i>	<b>Step 1</b> How is Samarco involved in the financialization process?	Samarco core characteristics	Shareholders	Who are Samarco's shareholders? Describe their core characteristics: corporative nature, place in the global market, and shareholders. Is there any relevant factor for financialization?	Indirect measures	Samarco's Annual Sustainability Reports 2005-2015, Financial Statements, Vale and BHP Billiton's Sustainability Reports 2016
			Business nature	Legal type of corporation and productive field. Is there any relevant factor for financialization?		
			Market	Context: main producers and buyers, price negotiation. Is there any relevant factor linked to financialization?		
<i>Chapter 5</i>	<b>Step 2</b> What is the human rights discourse manifested in the Samarco's Reports?	Human rights guidelines		Search for the key-words: framework, guideline, code, law, policy, human right and describe the guideline adopted: voluntary or compulsory?	Content Analysis	Samarco's Annual Sustainability Reports 2005-2015
<i>Chapter 6</i>	<b>Step 3</b> How such characteristics relate to the tension between human rights discourses and the market discipline in the organisation?	Shareholders' interests		Based on these theory-generated categories, find the emerging categories that will allow the clustering for Content Analysis.	Content Analysis	Samarco's Annual Sustainability Reports 2005-2015, Criminal charging Sheet from the MPF and 2016 Complaint to the IACmHR
		Workers' protection				
		Communities' protection				
<i>Chapter 6</i>	<b>Step 4</b> What are the results of this behaviour and how do they relate to the tension between human rights discourses and the market discipline in the organisation?	Results/Impact		Find non-exhaustive results towards shareholders and two groups of stakeholders: workers and communities	Indirect measures	

Author's original.

Table 1 has specified the criteria for analysis. As the reader might have noticed, the other technique used was indirect measures; the next section explains this method together with the analytical procedures.

### 4.3.1 Content Analysis and indirect measures pathway

In the analytical procedures, indirect measures<sup>26</sup> were performed as a sole technique in Step 1, due to the complexity of the subject under analysis: the financialization process. Indirect measures occur naturally in the research context; examples are financial results, a list of the owners with the percentage of share, etc.<sup>27</sup>. Collecting indirect measures offer a wide range of data which would be hard to be produced by the researcher (Trochim, 2006<sup>28</sup>). The definition of what measures and how to collect them was determined by the case study protocol, as specified in Table 1. The findings of Step 1 were triangulated with Content Analysis findings.

I used categorization and clustering in pursuit of a systematic interpretation of the data. With the theory-generated categories shown in Table 1 and following the case study protocol, I identified *in vivo* categories for Content Analysis, which refer to categories emerged from the data (Marshall and Rossman, 2016, p.218). While theory-generated categories do not change depending on the data and can be collected/analysed by different methods, *in vivo* categories change depending on the data, so they are part of the findings. *In vivo* categories were generated by semantic clustering (Krippendorff, 2013, 205), through repeated analysis of the data until data saturation<sup>29</sup>. They are presented later, with the findings (Chapter 6 – Table 2).

The categories generated by clustering were the tools for analysing Samarco's narratives, which, in turn, allowed inferences about Samarco's context. Thus, after the categories generation and clustering, I performed inferences. Inferencing is the procedure of moving from

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<sup>26</sup> Both in indirect measures and Content Analysis, I was not a participant in the production of the *content* of the data used. Although I influenced the outcome of this study when I selected the data, the pieces of information were produced by someone else, with techniques that are out of my control, and for other purposes than this research - the financial results of the Company are an example (Trochim, 2006; Krippendorff, 2013, p. 45).

<sup>27</sup> Some measures were inserted into Excel spreadsheet for chart creation, or simple statistic calculation. Others were used as they were found.

<sup>28</sup> Trochim's work is a web book that does not have pages.

<sup>29</sup> An example of category generation in this study can be the category "volatility". I always read all reports in order: starting from 2005 until 2014, so it would be easier to realize new communicative patterns. By reading the risks, I realized that volatility started to appear more often over the years – open coding for Marshall and Rossman (2016, p. 222). Then, I engaged in a systematic search for "volatility" with Acrobat Reader's research functions. I also searched for "market" and checked the context with which "market" was referred to, and from such contexts, I did the same procedure with words that appeared, such as "variation". So, every time that I found a category, I reanalysed the data to confirm it. I took notes with the findings to which I could return if needed. I also created tables to reflect upon my categories, and to cluster and until data saturation (Marshall and Rossman, 2016, p.220).

the texts of the Reports to the context of Samarco, using the analytical construct and the theoretical propositions (Krippendorff, 2013, p.31)<sup>30</sup>.

The quality of the data was enhanced by validating the Content Analysis' evidence, the last step of Krippendorff's Content Analysis (2013, p.44), through new indirect measures (See Chapter 6, Table 2). Finally, I also performed inference on these measures to, in combination with the Content Analysis, develop the conclusions of this study (Trochim, 2006).

## 4.4 Trustworthiness

For the case study, Yin (2014, p.46) recommends four principles for trustworthiness: construct validity, external and internal validities, and reliability.

The construct validity refers to the suitability of the data and methods for answering the research questions. This study's construct validity relies on the logic linking the data and the theory and on the transparency of the criteria for interpretation exposed in Diagram 1, Tables 1 and 2<sup>31</sup>. Accordingly, due to the choice of the single case study, it is essential to justify why I did not perform triangulation of techniques, such as interviews with managers of the Company. The present case poses a sensitive situation for those involved. The Company and its shareholders, managers and employees are facing severe prosecution based on murder charges and accusations in labour, administrative and civil lawsuits. Any disclosure of events, even in anonymity, could compromise their career and self-defense in court. To compensate the lack of other techniques, I diversified the sources of data and the type of data, therefore making use of data triangulation<sup>32</sup>.

Internal validity is the coherence required for explanatory case studies; since this is an exploratory one, the only concern is with how the inferences were performed. The narratives and inferences were made with attention to Krippendorff's lessons for Content Analysis of institutional processes, as covered above. External validity refers to generalisation. This study is exploratory, and it does not intend to provide conclusive generalisable findings. It aims at

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<sup>30</sup> The inference using analytical constructs for Krippendorff resembles the analytical strategy of "relying on theoretical propositions" of Yin (2009, p.136).

<sup>31</sup> Table 2 contains the *in vivo* categories, it is presented with the findings in Chapter 6.

<sup>32</sup> The collection of information from multiple sources aims at corroborating at the same finding. The data triangulation is the use of distinct types of data to support the same information, it differs from the use of different data to find different information (Yin, 2014, p.120–121).

bringing possible contextual interpretations, valid enough to encourage further studies (Yin, 2009, p.148).

Finally, for reliability, it is relevant to present the steps in an operational way, allowing other researchers to follow it. I covered the procedures for data analysis in four steps and the requirements of Content Analysis for creating categories, clustering and inferring. To increase the reliability of this study, I presented the list of data sources used<sup>33</sup>, and I summarised all criteria in Tables 1 and 2, and I exercised the consideration of alternative explanations. I understand that my research achieved theoretical sufficiency in relation to its research questions, that is, collecting more data would lead to the same conclusions<sup>34</sup> (Marshall and Rossman, 2016, p. 229). The findings reveal a reality that both agrees and resists to the theory, and such features were analysed in depth herein, producing a flexible conclusion, friendly to further data and analyses.

## 4.5 Researcher background and ethics

I have experience related to this case on the ground as I am originally from the region where the disaster occurred, and I lived in cities trespassed by the impacted river. I worked for one year as a legal intern at the Minas Gerais State's Office of the Prosecutor with Environmental Law in *Viçosa*, and I collaborated with the People Affected by Dams Movement (*MAB*) in the region of Mariana<sup>35</sup>. I consider that my background attenuates the absence of field work. It also led me to the choice of this case for the research as I am critical of the Brazilian state's development policies and lack of law enforcement, as well as Samarco's behaviour. The curiosity about the favourable socially-structured conditions to this disaster led me to engage in this research.

Concerning ethics, the use of documents raises certain responsibilities (Marshall and Rossman, 2016, p.167). I only analysed documents revealed to the public, with no need for subjects' consent. When I analysed them, I reorganised the information, revealing aspects regarding Samarco's reputation. Nonetheless, I do not consider that this essay would increase the social distrust in the Company, already in place because of the disaster. According to Samarco's risk

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<sup>33</sup> Cf. also Appendix 1.

<sup>34</sup> The theoretical sufficiency refers to the answers to the research questions. There are several other questions to be investigated, and I also present recommendations for further studies in the end.

<sup>35</sup> As member of the Popular Legal Advisory (*AJUP*) of the *Universidade Federal de Viçosa*.

assessments, civil society positioning – which includes such research - was foreseen as a social outcome if a disaster involving the tailings occurred (Samarco *apud* MPF 2016:185)<sup>36</sup>. Finally, I only refer to actors by their positions and professions, never by their names.

In continuation, Chapters 5 and 6 present the findings.

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<sup>36</sup> This risk assessment is further explained in the findings, Chapter 6.3.4.3.

## **Chapter 5: Samarco's human rights guidelines and financialization process**

This Chapter considers the Literature Review and the Theoretical Approach for analysing the first set of data, establishing the context in which Samarco operates. This context will complement the in-depth analysis in the following Chapter 6.

I first consider the guidelines adopted by the Company to protect the human rights of workers and communities, and the environment<sup>37</sup>. Then I introduce how Samarco is involved in the financialization process by investigating the Company's core characteristics: shareholders, nature of business and market. In relation to Diagram 1 and Table 1 presented in Chapter 4 (Methodology), this Chapter provides steps 1 and 2 of the analysis and answers to the research question 1 and part of question 2.

### **5.1 Samarco and human rights**

By Content Analysis of the Reports, I identified guidelines for action orientation and guidelines for auditing/reporting on human rights and socially responsible behaviour.

I found four core frameworks of action: a) UN Global Compact since 2002, which were also included in the (b) Mission, Values and Objectives Statement; and into the (c) 2002 Code of Ethical Conduct; and (d) Millenium Development Goals (Cf. Appendix 2<sup>38</sup>).

Frameworks for auditing/reporting were three: Corporate Responsibility Report Guidelines; Global Reporting Initiatives Samarco; Samarco's Integrated Management System for Quality, Environment, Occupational Health and Safety, and Information Security. Additionally, at least 13 secondary frameworks were found<sup>39</sup>.

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<sup>37</sup> The main document analysed was Sustainability Reports. They are the main communication document of the Company, introducing the Company's accomplishments throughout the year, exposing the Company's core information regarding management, strategies, and values. It summarizes the financial results, and presents environmental, social and labour issues, showing the Company's involvement and actions towards corporate responsibility. It also presents the Company's awards in different areas, including transparency, environment and safety. The main indicators are from Global Reporting Initiative, found in <https://www.globalreporting.org/Information/about-gri/Pages/default.aspx>.

<sup>38</sup> Content Analysis of Samarco's Reports produced many references, which were too long to put in-text. Therefore, all references to Samarco's documents are provided in Appendix 2.

<sup>39</sup> Ethos Indicators of Social Responsibility (Samarco 2007, p.135; 2005, p.95; 2013, p.31; 2014, p.20); Desired Institutional Image Samarco 2005:48; Strategy Management Model (Samarco 2005, p.52; 2007, p.20); 2006

Accordingly, the Company explicitly assumes the compromise with international human rights law<sup>40</sup>. More specifically, the Company is a signatory to the UN Global Compact, and it claims to be taking actions correspondingly. The measures include all steps required by the voluntary framework: the creation of policies recognising human rights international standards, the assessment of human rights impact caused by the activity, the integration of human rights into the business operations and, finally, measuring and reporting the performance of mitigating actions. The Annual Reports document the measures of the year, and in 2013 it was established a Human Rights Committee, composed of high-level managers of the Company (Samarco 2015, p.17).

In this sense, it is possible to recognise that there are a consistent commitment and awareness of the Company regarding its responsibilities under the voluntary human rights approaches. However, the critique towards voluntary approaches argues that commitment does not necessarily translate into meaningful actions. The theoretical approach adopted suggests that other normative frameworks are influencing the Company's behaviour, such as the shareholder value maximisation.

## **5.2 Samarco shareholders: Vale and BHP Billiton**

By reviewing the Reports published by the three corporations, it was possible to identify that *Samarco Mineração SA*. is a national private closely-held company, so its shares are not commercialised in stock markets. It was created in 1973 as a joint venture, and since 2000 it is owned equally by the corporations BHP Billiton and Vale SA, who share the Company's assets by 50% (Samarco 2006:23).

BHP Billiton is an Anglo-Australian multinational corporation of open capital (with shares in stock markets), "which is the largest diversified miner in the world. Its main products are iron ore, diamonds, coal, petroleum, bauxite, copper, nickel and uranium" (Samarco, 2017). Vale SA is a Brazilian company of open capital, which was privatised in 1997, being "a global leader

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Business Pact for Integrity and Against Corruption (Samarco 2006, p.14; 2007, p.19; 2008, p.12) 2007 Samarco Social Investment Policy (Samarco 2007, p.120; 2008, p.37); 2010 Social and Institutional Investment Policy (SIIP) (Samarco 2011, p.24); 2010 Sustainability Guide (Samarco 2010, p.31; 2011, p.15); Development and Engagement Policy (Samarco 2011, p.36) Corruption and Fraud Prevention Policy (Samarco 2012, p.17); Open Letter to Brazil on Climate Change (2012, 2013, p.26); 2012 Sustainability Model (Samarco 2013, p.21, 2014, p.64); 2012 Letter Business Contributions to the Promotion of a Green and Inclusive Economy (Samarco 2014, p.31).

<sup>40</sup> "With respect to human rights, the Code of Conduct complies with the treatment consolidated in laws, regulations and principles generally adopted by society" (Samarco, 2007, p.49).



in the production and export of iron ore and pellets” (Samarco, 2017), among other products (Vale 2015:36-37).

According to their Reports, the ownership of these two corporations are from financial institutions<sup>41</sup>, such as holding companies and banks (Gong, 2016, p.83). A holding company is created to own other’s companies’ stocks and control its management and policies; its purpose is “to hold assets”, not producing goods or services.

In February 2017, Vale SA had its ownership controlled by *Valepar*<sup>42</sup>, created with the sole purpose of holding Vale’s controlling assets (Gong, 2016, p. 87). Other 53% of the shareholders are also from the financial sector<sup>43</sup>. The rest of shares is owned by institutions, persons and pension funds. In sum, at least 86% of Vale SA is owned by financial institutions or investors from stock markets. Its primary influencer of policies and management, *Valepar*, in turn, is 100% owned by holding companies (Vale, 2017).

BHP Billiton is not controlled by any corporation or government (BHP 2016, p.308), its ownership is substantially spread among global investors. The 2015 Annual Report brings a list of its 20 major shareholders, which together own 58% of BHP Group. These 20 shareholders are all financial institutions (BHP, 2016, p.309. See Appendix 3 for names).

Xun Gong (2016) found similar numbers in his studies of different years, and concludes:

while the fact that the three mining giants [BHP Billiton, Vale and Rio Tinto] have been increasingly penetrated by financial institutions (...) does not simply mean that the later possesses absolute control over the former, it is certain however that the former must align its interest with that of the later (i.e. financial capitalists) to a large extend” (Gong, 2016, p.88).

Thus, the first finding of this section is the possible alignment of the Company’s behaviour to financial interests via ownership.

It is worth noting that in 2015 BHP Billiton had a gross revenue of 44,6 billion dollars. Vale SA had a revenue of 27 billion of dollars, 60% from iron ore operations (Vale, 2016, p.37); its

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<sup>41</sup> A financial institution is an establishment that conducts financial transactions such as investments, loans and deposit, such as Commercial and Investment Banks, Insurance Companies, Investment Companies, and Credit Unions. Pension Funds are also becoming financial intermediaries.

<sup>42</sup> 53,9% in controlling seats and 32,7% in capital.

<sup>43</sup> 29% are investors from the NYSE (New York Stock Exchange), 18% is owned by BOVESPA, Sao Paulo Stock Exchange and 6% by BNDESPAR, Brazilian Development Bank – Brazilian Government (Vale (2017)).

payments to investors reached 9,7 billion of dollars. These numbers are illustrative to show that, even though Samarco is a smaller company than its owners, Samarco's numbers (dividends payment of \$1,6 bi in 2013, \$1,3 bi in 2014 and \$1 bi in 2015) are relevant to the outcomes of its two shareholders.

Furthermore, the identification of the owners of Samarco and their owners, highlights the primary beneficiaries of Samarco's operations. Samarco disaster cannot be considered caused only by few people taking strategic managerial decisions (Wanderley, Mansur and Pinto, 2016, p.45-50). Decisions were made in order to attend certain interests, and identifying the owners expose *whose* interests were under consideration (Wanderley, Mansur and Pinto, 2016, p.52). Particularly due to its ownership being shared by two other corporations, the beneficiaries are, ultimately, owners of financial institutions who own the shareholders of Samarco. Having this in mind, we now turn to the market in which Samarco operates.

### **5.3 Iron ore global market and late financialization**

The Reports inform that Samarco's production<sup>44</sup> is 100% destined to exportation, in the following order of sales: Africa and the Middle East, Asia not including China, Europe, China, Americas (Samarco 2015, p.27). The Company is, therefore, essentially exposed to the global market. Moreover, the two owners of Samarco are the leading mining producers in the world; together with Rio Tinto, BHP Billiton and Vale dominate the iron ore global market (Gong, 2016, p.18).

The media sources indicate that the iron ore was part of the so-called commodities boom – due to emerging economies (such as China), soaring prices and high demand fostered the industry expansion, the production grew, and the rentability of the businesses experienced a peek. The annual pricing system used hitherto by the buyers and sellers was not following the speed of the market boom, which led the biggest three producers to change the pricing negotiation mechanism to a quarterly scheme (Els, 2015). They claimed the necessity “to reflect a more market-oriented system” (Vale *apud* Gong, 2016, p.19), as it would reflect the market demand in a timelier manner (Ma, 2013, p.621).

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<sup>44</sup> Samarco realizes four main activities: iron ore extraction, iron ore processing, transportation though pipeline and transoceanic transportation. Its production is considered commodities, which are raw materials, unprocessed or semi-manufactured (Samarco 2011, p.10).

In the literature, authors claim that this move corresponds to an ultimate *financialization of the iron ore market* (Dwyer, Gardner and Williams, 2011, p. 49; Gong, 2016, p.49), increasing the power that financial institutions exert over this market. In fact, as presented in the literature review, the presence of financial institutions is a strong sign of the process in a non-financial industry. The iron ore market is considered as having a late financialization, which happened following other commodities (Bartholomeusz, 2016).

Moreover, the commodities boom was succeeded by a post-boom, a market slowdown. In this scenario, companies adopted different strategies, such as financial practices and contingency of production costs, to keep the rentability of the business at the same level as experienced during the golden years (PoEMAS 2015, p.18; Davies and Martins 2009; Gribel, 2016). When these strategies protect mostly financial institutions and shareholders, there is more evidence of financialization<sup>45</sup>.

The identification of Samarco's owners as actors towards the financialization of the market in which Samarco operates is a relevant finding regarding the influence of the financialization process over Samarco's behaviour. The literature argues that corporations are driven by and are drivers of the financialization. So far, the findings show that Samarco's shareholders are financialized corporations, which acted together in the global market towards financialization of the market in which Samarco makes businesses.

In turn, the financialization of the market is likely to impact the strategic decisions made by Samarco. And the interests of the shareholders are certainly taken into consideration. These two influencers – the owners and the market – are revealed to be instances embedded with market discipline, what is more, with a financialized market discipline.

But the issue of how this influence occurs remains. The corporate behaviour is performed through strategic decisions; therefore, I endeavour a closer look at it. The next section presents the risk management practices of the Company as a suitable arena for analysing the tension between human rights discourses and the values and norms brought by the market discipline.

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<sup>45</sup> On the other hand, since the quarterly index system, certain indices were adopted for determining the prices. These indices are proposed by corporations that are, themselves, owned by financial institutions. Gong shows that, in 2012, some of the owners of the three corporations were also owners of the index providers (Gong, 2016, p.89). Financial institutions are not the only actors in this context, but they have a robust and multifaceted presence and are in a position to influence strategic decisions of firms. For a visual check, refer to Gong's Chart (2016, p.91).

Considering the exposed above, Chapter 6 investigates how the shareholder value and related practices can affect stakeholders' human rights.

## Chapter 6: Risk management, results and impacts

This Chapter presents the main findings of the study. I analyse the narratives of Samarco's strategic choices, that is, the narratives of risks and solutions adopted. The Content Analysis brings to light how these narratives are narrowed in the organisational context and alternative ways of doing things are excluded from practice (Ville-Pekka, 2011, p. 177). I then assessed the Company's results and impacts on the interests of the shareholders, workers and surrounding communities.

Considering the theoretical propositions exposed in Chapter 3, I then present an understanding of Samarco's corporate behaviour in which the tension between human rights interests and the market discipline is established. This Chapter refers to steps 3 and 4 as exposed in Diagram 1 and Table 1 (Chapter 4), answering to the research question 2.

### 6.1 Risk management and strategic decisions

The Reports revealed that Samarco underwent different moments in its risk management practices, adopting diverse methodologies, guidelines and plans of action over the ten years under study. But the decision-making structure of the Company remained the same. For the management of financial risks and operational risks, decisions were made by the same Board of Directors, the higher administration of the Company (Samarco *apud* MPF 2016:182; Samarco 2010, p.37-38). Moreover, Samarco states in its Reports the Company's "Business/Corporate Strategy", whenever the Report referred to essential decisions and plans of action for short or long terms (Samarco, 2009, p.24; 2010, p.26). The decision structure suggested that this was the locus of the narratives, so "Risk management" was thus the first category found<sup>46</sup>.

By Content Analysis of reported risks and strategies adopted; I identified the subsequent categories by reading the Reports and searching for patterns, then reanalysing until theoretical saturation (Marshall and Rossman, 2016, p. 219), as detailed in Chapter 4. The next sections present the analyses, and in the end of the Chapter, Table 2 summarizes all categories.

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<sup>46</sup> "we recognize the negative impacts which can be created by our activities – especially those related to health and safety, environment and communities, consumption of natural resources, and generation of waste and its disposal in dams, for example. It is part of our management approach to analyse and mitigate all possible risks" (Samarco 2013, p.14).

## 6.2 Business risks, the global crisis and corporate strategies

In the Sustainability Reports, the assessment of *financial risks* mentioned volatility of the market, price drop, demand drop, or the increase of suppliers – meaning an increase of competitiveness (Samarco, 2015, p.24). Accordingly, it was possible to note that Samarco’s business nature is of extreme financial risk, with changes impacting its activities from year to year. They often needed to change focus, trying different actions to compete in a hostile market.

The financialization of the global market in iron ore is recent (Bartholomeusz, 2016), but it was quickly felt by Samarco. In 2010, the Report noted that the new pricing mechanism<sup>47</sup> represented revenue upwards (Samarco 2012, p.10,150). But while between 2005 and 2010, Samarco reports did not highlight the volatility of the market, between 2011 and 2014 the reference to the volatility of the iron ore prices is commented by the CEO and exposed in other sections at least 12 times (Cf. Appendix 2). This concern reflected in practice, namely when Samarco introduced in 2011 the “Business Intelligence area”, which “has proven to be highly important throughout the year, when the Company had to face the volatility of market prices” (Samarco 2013:41). Regardless whether due to the new mechanism or to other factors, such as the firms’ growth, this concern with prices volatility indicates a higher pressure of the market on Samarco’s behaviour, so a financial-market-led behaviour would be expected.

On the other hand, market opportunities meant a promising market environment, with rises in the market prices (Samarco 2006, p.18; 2008, p.11), growing demand and limited suppliers – Samarco as one of the few producers (Samarco 2011, p.10).

With regards to strategies adopted to deal with the market risks and opportunities, what emerged from the data comprised mainly *expansion* and *austerity*<sup>48</sup>. Sometimes the strategy would be hidden in other language with keywords such as sustainability and responsibility, but a careful reading of the integrated text would highlight the dominance of these two.

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<sup>47</sup> Described in Chapter 5.3.

<sup>48</sup> Austerity was the term used by Samarco in its Reports, so the category was named accordingly, although austerity is often used a technical macroeconomic concept. It is used here as practices implicating in cost reduction in operations and workforce.

A typical example is the Business Strategy of 2009, which headline is “The path chosen by Samarco brings together sustainable growth, operational excellence and management excellence” (Samarco 2010:24). Although there are three “ways” on that “path”, there is only two practices: expansion and austerity. The expansion is hidden by the term “sustainable growth”, which close after is explained as “to *increase* the value of the Company, *expanding* our production and sales capacity, ensuring continuation of the business” (Samarco 2010:24). Austerity measures are the real actions towards “operational excellence” and “management excellence”; this interpretation is harmonised with the rest of the text: “The [Strategic] Map covers the following objectives: Increase revenues; Maximize profitability of business; Ensure a positive reputation” (Samarco 2010:27). The goals of increasing revenues and maximizing profitability, together with expansion, possibly entails a cut of production costs, by applying austerity measures<sup>49</sup>. The term “positive reputation”, in turn, refers to reliability in all Samarco relations, which does encompass socioenvironmental concerns, but primarily focuses on market, consumers, creditors and financial results<sup>50</sup>.

The Content Analysis showed that this strategy pattern is not isolated, but it repeats over the years. From 2008, the CEO messages indicated an increase of *austerity* narratives related to financial risks, a typical example being “cut back sharply on our costs and expenses, increased our level of austerity” (Samarco 2010:17) and the like<sup>51 52 53 54 55</sup>.

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<sup>49</sup> As stated by the CEO: “requiring measures of austerity and efficiency to be able to continue growing” (Samarco 2013, p.9).

<sup>50</sup> Definition of Samarco’s reputation-related practices: “Corporate image and reputation management. We have been seeking to construct, over the years, a positive reputation, founded on assumptions we deem relevant: • attainment of solid financial results; • perspectives of continuous growth and clear vision of the future; • prioritization of transparency, ethics, and sustainable relationships; • supply of high-quality products and services; • satisfaction of our clients; • emphasis on innovation, which allows anticipation of changes; • strong leaderships and committed teams; • attractive workplace environment; • socio-environmental performance; • ethics and transparency” (Samarco 2010, p.38-39).

<sup>51</sup> “

<sup>52</sup> “assuring competitive costs and yielding ever better results” (Samarco 2012, p.4).

<sup>53</sup> “requiring measures of austerity and efficiency to be able to continue growing” (Samarco 2013, p.9).

<sup>54</sup> “high productivity, low production costs, quality that meets market demands, and a strong reputation” (Samarco 2015, p.26).

<sup>55</sup> “As a result of strict cost management and assurance of good margins for products with higher added value, our net income reached R\$2,731.4 million, 3.2% more than the previous year. These were results achieved by mobilizing our employees in all areas, from production to sales offices, including all operational and strategic support areas” (Samarco, 2014, p.7).

With regards to *expansion*, this strategy has been adopted since before 2005 (Samarco 2006, p.18). In 2006, the Company expressed the aim to triple the sales in 13 years but by 2012 the sales had more than tripled, so the “2022 Vision” was launched, aiming at doubling the Company’s worth in 10 years. Samarco underwent 3 projects of expansion in 20 years<sup>56</sup> but the last strategic decision for expansion (in 2012) occurred in a new macroeconomic scenario (PoEMAS 2015, p.24). The global crisis of 2008 was unexpected<sup>57</sup> and required different manoeuvres to maintain the growth plans and keep the rentability high<sup>58</sup>.

This decision to maintain the plan of expansion, despite the economic crisis and the market instability, reveals the adoption of an aggressive corporate behaviour fostered by the big companies in the sector, including its shareholders, called “expansion of economies of scale” (Wanderley, Mansur and Pinto, 2016, p. 50). It is a counter-intuitive measure to secure the shareholders' high profits during a market slowdown (PoEMAS 2015, p.25). It aims at producing more, even considering the low market price, with the purpose of reducing the production costs (Samarco 2015b:13). By producing more, it keeps the cost low and therefore guarantees high margins of profit (Samarco 2015b:13).

In conclusion, these two themes – austerity and expansion – englobe roughly all business strategies adopted. It is possible that some dissident strategies were unwittingly left out of this analysis, but the weight of these two already represent the financialized characteristic investigated in this part of the research. In accordance with the literature, the description of Samarco’s view on market’s risks and Samarco’s main strategies show that the selection of corporate practices – expansion during a market slowdown and austerity measures even during a promising market (Samarco, 2009, p.11) – has been guided by the maximisation of the shareholder value.

As a normative framework to be followed by the Company, the shareholder value narrows Samarco’s narratives into a limited reasoning, therefore narrowing also its actions. The narratives presented in the Reports show a narrowing in business practices to aggressive and austere behaviours. The scenario of a crisis could be dealt with in diverse ways, such as reducing

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<sup>56</sup> With the P2P it increased the production by 100% between 1994 and 1997, with the P3P it rose by 54% between 2005 and 2008 (Samarco 2009: 3), and finally, with the P4P it increased 37% between 2012 and 2014, over what had been increased before.

<sup>57</sup> The 2007 Report foresaw exponential growth until 2015.

<sup>58</sup> Accordingly, Samarco’s shareholders also intensified austerity measures, and in only 3 years, Vale decreased 30% and BHP Billiton in 19% their costs of production of the iron ore (Gribel, 2016).



profit margins or slowing down the production, but such alternatives are discouraged by the shareholder value and other normativity derived from the market discipline. The strategic choices decreased the financial risk by increasing the social risks, as shown in the financial results, operational risk management and impacts, analysed in the next sections.

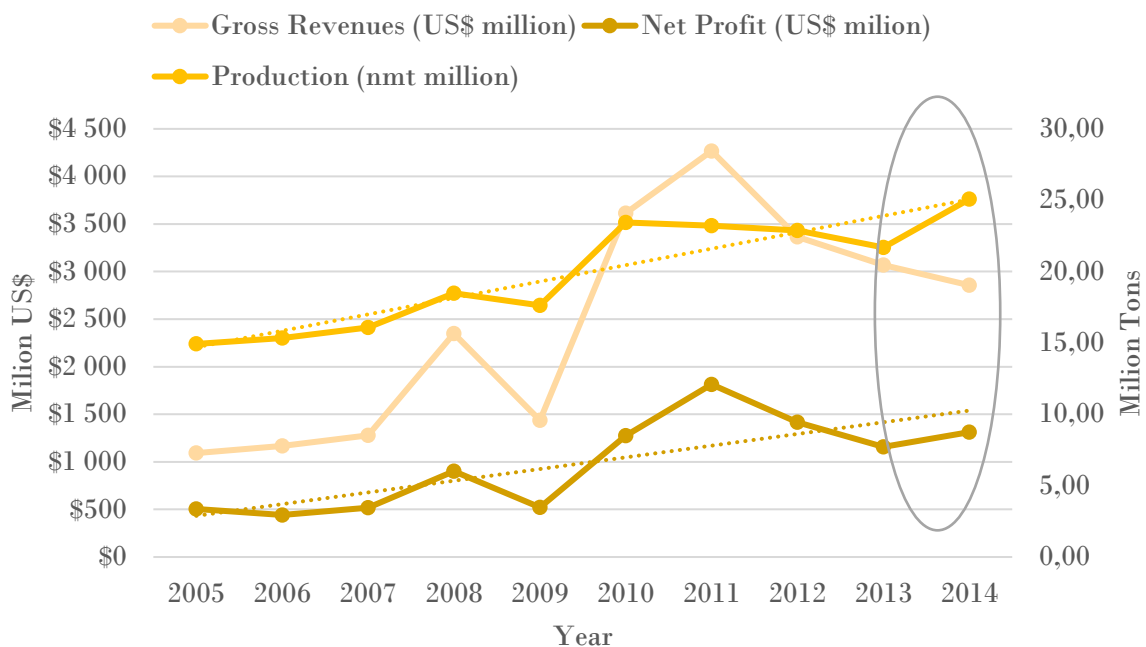
## 6.3 Corporate strategies and financial results

This section presents measures from Samarco's Reports aiming at analysing whether the results safeguarded the shareholders' interests. A simple observation of profits and revenues is commonly used for that purpose (Dyson, 2010, p. 226), so these two financial outcomes were considered; while production and the iron ore market price were used for contextual comparison. Gross indebtedness was observed because the theory stresses this characteristic in financializing firms.

### 6.3.1 Revenue, profit and production

To consider the results towards the owners, it is common to compare the profits and the revenues (Dyson, 2010, p. 226). Chart 1 also includes the production for comparison:

Chart 1 – Gross revenue, net profit and production of Samarco, between 2005 and 2014



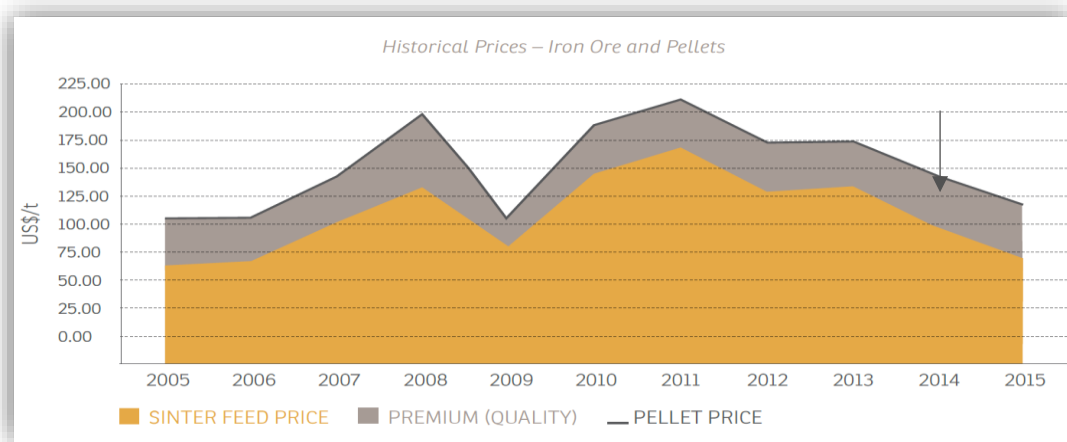
Source: Author's original chart, based on Samarco Sustainability Reports and Financial Statements, from 2005 to 2014.

The production and net profit presented upwards trendlines. However, the revenue line is more unstable, exposing an uncertain environment, as the revenue is related to the market price. On 31 December 2014, the antecedent year of the disaster, for the first time, the financial scenario had the highest production ever and profit growth *during a revenue downward*. This divergence between the profit and the revenue in that year's results suggests that strategic actions were taken to overcome the financial risks of the revenue drop. Expansion and austerity resulted in higher production and increase in profits, 60% of it shared in dividends payment (Samarco 2015, p.41). In fact, payments to shareholders were, every year, significantly above the minimum of 25% over profits required by Brazilian Corporate Law (*Brasil, 1976*) and adopted by Samarco's Statute (Samarco, 2009b, p.9).

### 6.3.2 Iron ore price

Image 1 compares the above results with the market environment. As expected, in 2014 the prices presented a downward trend, the line is similar to the revenue line:

*Image 1 - Prices of the iron mine between 2005 and 2015*



Source: Reproduction. *Samarco, Sustainability Report 2014*.

Samarco presented the above chart to explain the lower revenue in 2014, and affirmed that the trend of lower prices would continue during 2015 and 2016 (Samarco, 2015, p.24). This suggests that the Company continued to cut costs and reduce financial risks in 2015, the year of the disaster.

### 6.3.3 Gross indebtedness

Between 2005 and 2014, Samarco's gross debt increased from \$335 million to circa \$4,4 billion in 2014 (Samarco 2006, p.61; 2015, p.17). Regardless of its causes – considered to be the

expansion processes – this fast indebtedness represents further pressure for productivity (Wanderley, Mansur and Pinto, 2016, p.59). Samarco itself affirmed in 2005 that indebtedness is a risky strategy used to increase profits (Samarco 2006:59 footnote), which, in view of the above profit raise, puts indebtedness as a choice in favour of the shareholders.

### **6.3.4 Interpretation**

In the scenario of financialized shareholders and financialized marketplace, Samarco's strategies seem strongly influenced by the shareholder value. As suggested during the Content Analysis, Samarco's financial risks management seemed not only guided by the broader market discipline, but also present the specificities of financialized practices in at least three moments: fast indebtedness and intensification of austerity policies, resulting in increase of profits which are shared at large between the shareholders. The relevance of these practices for the disaster is that the dam collapse happened when it was combined: low prices, lower revenue, high production, high profits and high indebtedness. The first two factors are circumstantial<sup>59</sup>, but the last three are the result of strategic decisions that could have been done differently.

## **6.4 Operational risks and impacts on workers and communities**

The strategic decisions made by the Company certainly affected different stakeholders in diverse ways<sup>60</sup>. For the scope of this essay, the question is: since the Company has been favouring the shareholder value maximisation in its strategies, does it necessarily mean that the interests of communities and workers, as stakeholders (Samarco 2010, p.38), are negatively affected?

This section analyses Samarco's behaviour towards compliance with environmental law, the Company's distribution of wealth among workers, and the operational risks accepted towards the workers (occupational safety) and the communities (infrastructure safety and impact assessment) (Milanez and Losekann, 2016, p.409).

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<sup>59</sup> Yet caused by human action therefore also politically manageable by other actors.

<sup>60</sup> The relation with the consumers and the payment of taxes to the State, and, as presented by other researchers, increased its use of natural resources, such as water and electricity (Wanderley, Mansur and Pinto, 2016, p.58).

### **6.4.1 Environmental compliance and legal positioning**

Samarco's socio-environmental investments are not identifiable as compulsory<sup>61</sup> or voluntary, which did not allow for a sound analysis of its numbers. But Content Analysis of the section on environmental compliance revealed that Samarco actively adopted legal actions to prevent lawsuits and the establishment of liability regarding socio and environmental obligations, at the same time that the Company distributed dividends way above the minimum required by law, as mentioned above.

In the analysed Reports, Samarco summarised its positioning in the environmental legal procedures under which it was investigated or defendant. Until 2008, in 100% of the cases the Company presented defence for non-liability. Between 2009 and 2013, the Company defends or pays fines without a pattern. From 2011, the information regarding environmental compliance and fines started to be vague, and in 2014, there is no information about environmental compliance at all (Samarco, 2015, p.78). This increasing lack of transparency should be noted as a convenient communication tactic for a company that is in expansion processes and building new infrastructure, including pipelines.

Moreover, although a defensive positioning is expected (in fact, it is the enjoyment of a constitutional right), it should also be regarded as a manifestation of narrowed practices. In the Reports, legal risks are regarded as financial risks. When environmental protection is considered a financial risk instead of a duty, the strategy becomes to manage acceptable risks, with the focus away from law compliance.

One of the adopted practices is to minimize costs by denying liability, which provides resistance for internalising the externalities of the activity. Actions such as fully compliance, due diligence and good faith are dismissed and strategies such as a reduction of shareholders' dividends in benefit of other stakeholders are excluded of the narrative. Stakeholders are also right-holders, therefore diminishing shareholders' benefits in favour of workers and communities should not be absurd, but the shareholder value portrays it as absurd. Thus, the persistent legal positioning of non-liability as risk management practice suggests Tony Evans' perspective of the market discipline standing above the law, the shareholder value having primacy. Such practices are

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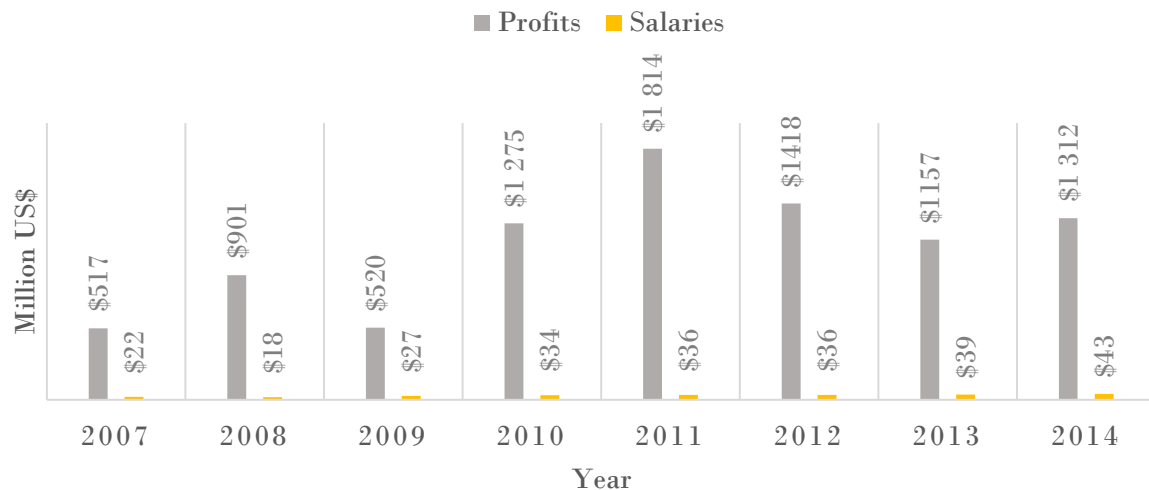
<sup>61</sup> Due to agreements with the Public Prosecutor, result of violation notes or constraints for the permits.

deemed as normal and acceptable even though being collectively harmful and human rights abusive.

## 6.4.2 Unequal distribution of wealth

A comparison between the shareholders' wealth and the employees' gains is shown in Chart 2:

Chart 2 – Salaries and Profit comparison. Samarco Mineração, between 2007 and 2014



Source: Authors' original chart, based on Samarco Financial and Sustainability Reports 2007 – 2014<sup>62</sup>.

The chart shows an increase of expenditure in salaries and benefits for workers over the years. But the values expose the stagnation of wages, considering that the number of employees grew from 1743 in 2007 to 2969 in 2014 (Samarco 2008, p.82; 2015, p.53). While the salaries remained stable over the years, the profits increased almost 200%, during a global crisis. As already argued, the increase of profits was possible due to strategies adopted - expansion and cost reduction. Chart 2 suggests that wage policies of the Company were part of the cost reduction.

According to the Financialization Theory, wages stagnation is a logical outcome; there are no alternatives for the managerial practices, such as not engaging in cost reduction via labour relations. The financialization does not start the project of exploitation of workers, but it does intensify it, with the vulgarisation of practices for the shareholder value maximisation. And while the shareholders benefit financially, other groups are the primarily bearers of the operational risks adopted by the corporate strategies.

<sup>62</sup> 2005 and 2006 Reports do not provide clear information on this matter. The profits in 2013 and 2014 are estimated, because in these years the reports only presented the values in *Reais*.

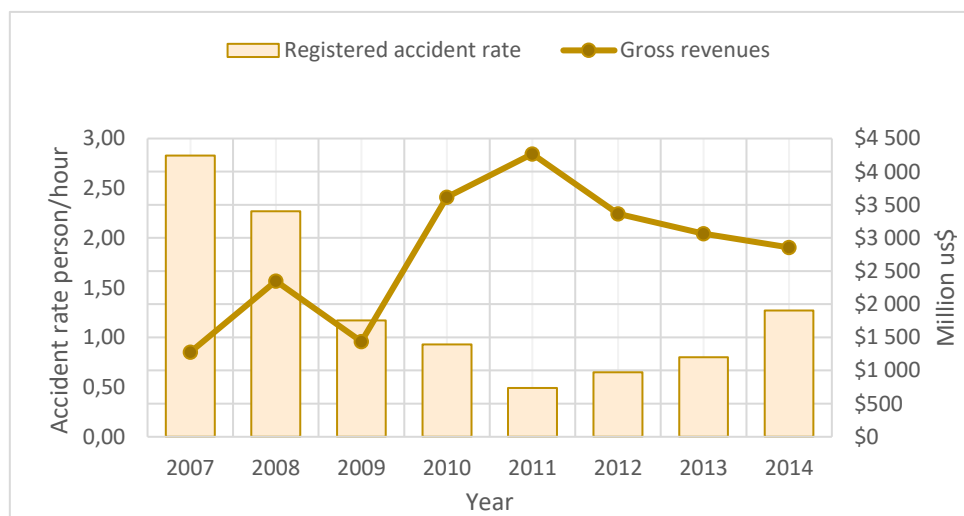
### 6.4.3 Increase of Operational Risks

The main operational risk in mining activity regards safety, which encompasses workers' (occupational) safety and structural failures able to affect the environment and the surroundings (Samarco, 2009, p.7; 2013, p.36).

#### 6.4.3.1 Accident rates and occupational safety

Chart 3 shows a relation between the occupational safety and the financial risks management.

Chart 3 – Accidents rate per million of person-hour worked<sup>63</sup>



Source: Author's original, based on Samarco's Reports from 2007 to 2014. There are no available numbers for the other years.

Over the years, higher revenues were alongside with lower accident rate and lower revenues with higher accident rate. I calculated the statistic correlation between the variables and the coefficient  $r$  found was  $-0,76$ . I cannot affirm the causality between these two variables, but I can affirm that there is a strong negative correlation between them, which requires the investigation of how.

Considering the other analyses presented above, it is possible to infer that this antagonism occurs because of strategic decisions, suggesting that risk management strategies regarded workers' safety (therefore the right to life, safe workplace and health) *in light of* financial results. Although economics as a determinant factor is commonplace, the fragmentation of the organisational management can obfuscate the resonance of economics in peoples' safety and

<sup>63</sup> "In 2007, the reported accident rate was 1.9, which represents the number of accidents which occurred multiplied by a million and divided by the number of man-hours (sic) worked." Samarco 2008:46.

human rights. Driven by the maximisation of the shareholder value, corporate strategies for reducing costs implied the reduction of the workers' value, be it in salary, liability (by outsourcing/subcontracting) or, ultimately, in lives and dignity account<sup>64</sup>.

On the other hand, as Samarco highlighted, "low accident rates are no guarantee that the risks of high potential severity incidents are under control" (Samarco 2011, p.70); there is a need for constant infrastructure maintenance to prevent failures.

#### **6.4.3.2 Reported incidents and failures**

Samarco reported measures to repair incidents on infrastructure and pollution over the ten years of analysis. In 2006, 2008 and 2010 Samarco's pipeline leaked and polluted rivers with iron ore, letting cities out of water (Samarco 2007, p.81; 2009, p.90-91, 2011, p.117). Further information was not presented.

There was no increase in reported incidents over the years, which could signify a counter finding. Nonetheless, in this case, while the increase in incidents would suggest an increase of risk taking, their absence does not mean the contrary; the decrease in maintenance and investments in infrastructure is a silent negligence that will eventually burst into a disaster.

#### **6.4.3.3 Risks towards the surrounding communities and the environment**

A disaster is a term used to designate adverse events that overpower the capacity of response of certain society, community or nation. The difference between a natural disaster and an anthropogenic disaster relies on the first being essentially inevitable and the second occurring due to negligence, human error, or deliberate human action (Jha, 2010, p.1).

Aiming at establishing the disaster's authorship, the MPF presents the plan of investment for the Geotechnology sector, responsible for tailing dams' maintenance:

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<sup>64</sup> Outsourcing is a characteristic strategy of cost efficiency, and for Samarco outsourced corresponded to 52,2% of the total workforce by 2015 (Samarco 2016). Of the 14 workers killed, 13 were outsourced. Some corpses were found 110 km from the accident. The violence of these deaths is part of the charging sheet prepared by the Federal State Prosecutors, which deemed the murders as qualified by use of cruel means. In its decisions, Samarco reduced its liabilities towards workers through outsourcing contracts, but it also increased the risks upon them when took austerity measures (MPF 2016, p.56).

Image 2 – Samarco's Geotechnics Management 2011 - 2015

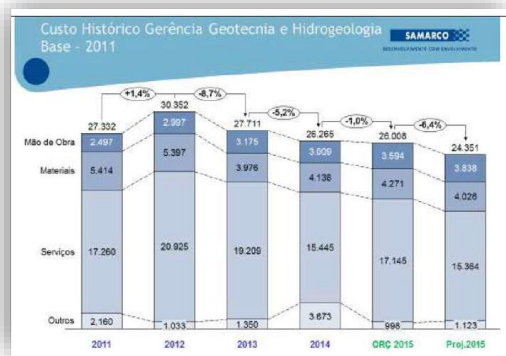
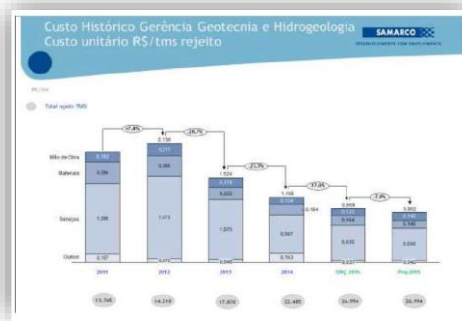


Image 3 – Rejects Cost Evolution 2011 - 2015



Source: Reproduction. Samarco Mineração *apud* MPF 2015, p.193<sup>65</sup>

Image 2 shows that investments in maintenance decreased, even though there was production increase in the period (MPF 2016:19). As a result, the cost of the reject produced was reduced, as shown in Image 3.

At the same time, the risk towards the environment and the communities raised<sup>66</sup>. By Content Analysis of the liability argument brought by the MPF, I found three different strategic decision moments: the choice for the dams' location and building method, the necessity of relocation of communities once the dam was built and the termination of the dams' operation once structural problems were identified (MPF, 2016, P.65, 163, 176).

In 2005, Samarco considered three locations in which the dam could be built and there were three ways to make it. Samarco chose the most populated place and the most unsafe technique of dam building, which the literature classifies as the oldest and cheapest option (MPF 2016, p.25,65,72-4). The second decision of risk taking was made in 2011 when the International Tailings Review Board (ITBR) recommended to the Board of Directors the relocation of

<sup>65</sup> Image 3 is blurry in the original. A bigger image is presented in Appendix 4.

<sup>66</sup> Civil Society organisations claim, in the Complaint to the IACmHR, that there is a technical coefficient used for assessing a dam's balance and risk of collapsing. This number varies between 1 and 2, and the minimum required by Brazilian law is 1,5. Samarco is responsible for 3 dams which are located at the Germano Complex: Fundão, Santarem and Germano. Fundão is the one which collapsed; it had the coefficient of 1,58 at the time of the collapse. Santarem and Germano operate with the factor at 1,37 and 1,22 respectively, that is, below the minimum safety recommended (BCO, 2016, p. 32).



communities situated in downstream of the dams' complex and the use of other techniques to enhance the dam's capacity other than building it upwards. Samarco ignored the recommendation and, not only did not relocate the endangered community, but also increased the risk of collapse by building upwards and raising the height to expand the dams' capacity (MPF 2016, p.163). Risk taking continued from 2010 to 2015, when different structural modifications led to various problems over the years, narrated in 90 pages of the criminal charging sheet. The decision for terminating operations in the dam, even temporarily, would decrease the collective risks. However, as an essential activity for the mining production, the management decided for the continuity of operations, which happened by acceptance of high collective risks.

There is evidence that the representatives of the shareholders expressed concerns when informed about the increase of risks on the dams' operation (MPF, 2016). This does not undermine the interpretation of increase in collective risks to benefit shareholders because the latter did not act against such decisions. The representatives did not exert their power of request or coercion over the responsible managers during many years of increasing risks. Moreover, Vale SA used the dam itself to deposit waste from its operations.

#### **6.4.3.4 Non-recognition of communities**

Despite Samarco's concerns for human rights compliance, it did not mention a Human Rights Impact Assessment for any of its expansion processes. Moreover, the Prosecutors demonstrate that Samarco did not recognise surrounding communities in its Socio-environmental Impact Assessments. The impact assessment for the construction of the *Germano* complex stated that *there were no communities* in the surroundings of its operations (MPF 2016, p.62), and therefore there was no required action for their protection. The disaster showed that not only there was a community close to the dam, but that "affected communities" should entail the real collective harm of a failure. There exist indicators for that: The Manual of Risk Assessment used by Samarco foresees the following consequences in case of the dam's collapse:

*Image 3 – Risk assessment on Germano dams’ safety.*

HEALTH AND SAFETY	ENVIRONMENT	COMMUNITY	REPUTATION
>20 FATALITIES, PARTIAL INCAPACITY (30% OF THE BODY) OF MORE THAN 100 PEOPLE	HIGH IMPACT (>20 YEARS) TO THE LAND, BIODIVERSITY, ENVIRONMENTAL SERVICES, WATER SUPPLIES OR AIR.	PARTIAL COLLAPSE OF THE SOCIAL ORDER. GENERAL HARM TO ITENS OF GLOBAL CULTURE. SERIOUS IMPACT ON CULTURAL PATRIMONY. COMPANY DIRECTLY RESPONSIBLE OR COMPLICIT OF SEVERE IMPACT ON HUMAN RIGHTS	REJECTION BY THE MEDIA AND SEVERAL NGOs. DIRECT ACTION OF THE COMPANY (INCLUDING PARTNERS) AFFECTED IN ITS REPUTATION. BIG VIOLENT PROTESTS (>100 PEOPLE) RESULTING IN FATALITIES

Partial reproduction after translation. From Samarco Mineração *apud* MPF 2016:185.

Non-recognition is customary practice among perpetrators or potential perpetrators because it excludes any legally required action (Hess, Ribeiro and Wieprecht, 2016, p. 97). It is called the invisibility strategy, used as a tool to control costs (Sousa Junior and Bermann, 2012, p.32). Besides the resemblance with the “Environmental law compliance” section, presented previously in this Chapter, the disaster showed that self-evaluation (performed by a private third party<sup>67</sup>) is not effective for environmental nor human rights protection.

It raises the criticism over voluntary approaches, the main human rights standards for business in place, as they accept and champion corporations to have its impacts assessed by self-evaluation, even for risky activities like mining. The discussion of the tension between human rights and market discipline is presented in the next section.

## 6.5 Risk management as a space of disputes

This section summarises the categories and combines the findings of Chapters 5 and 6 for interpretation.

### 6.5.1.1 Categories summary

Here is presented the overview of the categories that emerged from the data. Table 2 should be read from left to right, as the categories become more specific:

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<sup>67</sup> In Brazil, the Socio-Environmental Impact Assessment is presented by the Company to the public organ responsible for the construction/operational permits. It is performed by a third party, normally a consultant agency.

TABLE 2) *IN VIVO* CATEGORIES

Step of analysis	<i>In vivo</i> categories				
	Categories 1	Categories 2	Categories 3	Categories 4	Categories 5
Step 3	Risk management	Business risks	Financial risk assessment	Market risks	volatility, price drop, demand drop, increase of competition
				Market opportunities	increase of price, increase of demand, decrease of competition
		Strategies adopted	Austerity measures	reduction of costs, increase of productivity	
			Expansion	expansion, growth	
		Operational risks	Occupational risks	health, occupational safety	
			Environment Risks	pollution, incidents, infrastructural safety	
Human Rights Risks	freedom of association, child labour discrimination <sup>68</sup>				
Step 4	Results and Impact	Results	Financial results	revenue, profits, production, debt, iron ore price	
			Occupational welfare	wages, reported accident rate	
			Environmental protection	reported incidents, reported legal compliance	
			Human Rights protection	reported Human Rights Impact Assessment	

Authors' original. Source: Cf. Appendix 2.

Table 2 contains all categories analysed in this Chapter, presenting the clustering used for systematic analysis. Samarco's risk management, the first category, is divided into three subjects: business risks, which deals with financial sustainability and results; operational risks regarding the continuity of the activities; and compliance risks, that deals with trade reputation. The latter was beyond the scope of this study<sup>69</sup>; I analysed the first two types of risks: business risks and operational risks (Cf. Appendix 2).

<sup>68</sup> Samarco also reported a few concerns with *Human Rights risks*: Child labour (2008, 2009, p.59); freedom of association of the workers (2008; 2013, p.69; 2014, p.84), and discrimination (2014, p.19), and the same regarding the value chain (Samarco 2015, p.20). Since the delimitation of this study is the disaster, these concerns were out of the scope of this study and were not further investigated.

<sup>69</sup> After assessing its content: "Reporting and compliance risks are intended to anticipate the possibilities of errors or frauds in the internal processes, ensuring integrity, reliability and quality of the financial statements, good

Business risks were analysed with regards to its narratives of financial risk assessment (market risks and opportunities) and strategies (expansion and austerity). Following Samarco's standard definition, in operational risks, I found the categories of occupational risks and socio-environmental risks. Occupational risks included workers' health and occupational accidents. Environmental risks included pollution and incidents, such as dam's infrastructure (Samarco, 2007; Cf. Appendix 2).

The second part of the table covers step 4, its categories mirror the ones listed above, allowing the assessment of the strategies' impact on shareholders' dividends, workers' welfare and communities' protection.

### **6.5.1.2 Discussion**

In the sustainability reports, I found two narratives, one embodying the shareholder value and one championing the protection of the environment, workers and communities' human rights. Nonetheless, real action was taken through strategic decisions, which tended to prioritize the shareholder value narrative. Samarco choices were repeatedly taken to decrease financial risks. But the financial bar is set higher than the macroeconomic scenario would provide because of the shareholder value, which results in maximising practices, regardless of increasing risks towards the collectivity.

In this context, to claim that voluntary approaches are a sufficient solution for human rights' protection is incoherent (Kanalán, 2016, p.22; O'Byrne 2015:93). Letting high-risk activities such as mining, energy and great engineering to have its human rights impacts bargained within voluntary approaches is inappropriate (Kanalán, 2016, p.22). The financialization process seems to be intensifying the unethical characteristics of capitalism (Pearlstein, 2014), so the adoption of market-discipline-friendly voluntary approaches on business and human rights is unsustainable. And while binding instruments also can be market-friendly, they do not have to, since they are submitted to political processes, in which other actors are involved. So, the political sphere is the arena where human rights should be further discussed and become an instance of resistance and change (Goodhart 2008:191).

Furthermore, human rights appear in the Reports performing the role of silencing any debate on human rights, i.e. when the Company states that there were no complaints on human rights

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governance practices and transparency while disseminating corporate information it was not considered in the present analysis" (Samarco 2010, p.37), it was excluded from the analysis.

for an entire year, arguing that this demonstrated human rights compliance (Samarco, 2014, p.103; Evans, 2008, p.116). For being in a communicative media, such narratives suggest that akin silencing also happened in Samarco's organisational context (Krippendorff, 2013, p.72).

In Evans' critique, the market discipline affects human rights effectiveness when it renders marginalised a set of human rights that do not suit the market discipline, and when the human rights framework is applied to blame and punish individuals, preventing the social structures of being questioned. In the Samarco case, both moments are present. Harmful practices such as defensive posture regarding environmental law, accepted technical risks and lack of participation of stakeholders in risk taking, are considered normal business behaviour even though they entail human rights abuses (Milanez and Losekann, 2016, p.414). Such abuses are considered less legal and therefore are not object of accountability and liability is harder to be established. Whereas in the moment of a disaster, the available solution is to apportion blame on individuals.

While executives should be responsible for their decisions, human rights have the potential to bring the context of their actions under scrutinizing, and to offer more accurate solutions towards preventing this type of disaster from occurring (Balakrishnan, 2016).

In this sense, the presented analysis introduced the attention to a relevant process that is taking place<sup>70</sup>: the financialization of non-financial firms. This trend suggests that the prioritization of shareholders' interests over other stakeholders' is a practice not being disputed or overcome, but being intensified. The process of financialization makes the urge for profits something systematic and disciplinary embedded. What would be the place of human rights in this process, rather than being cooptated? How could human rights contradict such trend?

The narratives of Samarco's context show the risk management as the space of conflict. It also exposes the role people play in making the shareholder value a prominent normative framework in Samarco.

New narratives of action need to take place in contradiction to the shareholder value premises, and one option is the creation of a human rights culture, which has the potential to bring about a new economic system (Sklair, 2002, p.102). Narratives embedded with human rights political

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<sup>70</sup> In addition to the hypothesis that commodities cycles create intrinsic socio-environmental risks (Wanderley, Mansur and Pinto, 2016, p.41).

and legal discourses could broaden the options for practice, offering new ways of behaving. The risk management is a space of dispute. Human rights should reach for authority.

## Chapter 7: Conclusion

The present study aimed to comprehend the implications of the financialization process on the human rights compliance by business actors, by analysing the Samarco disaster case.

Despite *Samarco Mineração SA.* being a closely-held company, what should, at first sight, remove any consideration of financialization, a closer look revealed at least two factors pointing to its financialization. The possible financialization of its shareholders, and the financialization of the market in which Samarco operates indicate an increasing pressure from financial interests on Samarco's strategic decisions, and consequently, on its corporate practices (Chapter 5).

The presence of such pressure was also suggested in Samarco Reports' narratives of risk management strategies and financial results.

Initially, the narrative regarding "business risks" increased over ten years, and when the iron ore global market was financialized, the narratives after 2010 also indicated a more volatile commodities market for Samarco, which required strategic positioning.

It follows that there should be many ways to deal with these risks. However, the dominant strategies adopted by Samarco were expansion, performed even during a market slowdown, and austerity measures, taken even during a promising market environment, with the expressed goal of keeping the margins of profit high. The dominance of these two strategies in the narrative of the Reports suggested that practices mismatching the maximisation of the shareholder value were marginalised or excluded in Samarco's context. The limited options in Samarco's corporate practices suggested a narrowing of alternative ways of doing things (Chapter 6.1 and 6.2).

The Content Analysis, however, cannot reach the actual decisions made by Samarco. It cannot affirm that expansion and austerity were the actual strategies adopted because the Reports, while external communicative media, offer a limited reach of the internal organisational reality. Yet the financial results of the Company show that any strategy adopted, be it narrated in the Reports or not, led to an increasing of dividends payment for the shareholders even during lower income. This suggests the adoption of austerity measures. The results also show higher productivity every year, indicating an expansion process. One can infer that these two strategies affected the resources destined to keeping collective risks low – like measures for protecting workers and the environment – because the accident happened when it was combined: low

prices, lower revenue, high production, high profits and high indebtedness for the first time in ten years. The first two factors are circumstantial, but the last three are the result of strategic decisions that could have been done differently (Chapter 6.3).

In addition, the scenario presented in Chart 3 exposes a relation between occupational accidents and revenue. This brings the assumption that the firm invests less in safety when there is less income available, suggesting that the Company regards safety measures in light of the shareholder value: safety measures to the extent that dividends are not affected. Other data, such as the narratives on the Company's legal positioning regarding environmental compliance, also represent the prevalence of the shareholder value. The narrative entails a protection of financial results by increasing collective risks when it provides resistance to internalising the externalities of the activity. It reveals practices that are narrowed into a defensive posture and dismisses alternative actions such as fully compliance, due diligence and good faith (Chapter 6.4).

I did not find an increase in infrastructural accidents and failures over the years, which could represent a counter-finding. Nonetheless, infrastructural incidents differ from occupational accidents because it accumulates in negligence before a burst happens. During the commodities boom and the peak of revenues and profits, the Company did not increase investment in safety for a long term; rather, it planned a five-year cost contingency plan, decreasing the investments in tailing dams' infrastructure, while championing for maximum productivity, a practice considered by the MPF as negligent.

Furthermore, the police findings reveal that at least in three strategic moments, decisions concerning the collapsed dam increased the collective risks toward the surrounding communities and the environment: When deciding where and how to build the dam, when ignoring the advice for relocating the communities around the dam, and over five years of constant structural problems, the decisions for continuing the operations and increasing the dam's capacity. The findings also disclose the practice of non-recognition of affected communities in the impact assessment (performed by a contracted third party), thus strategically removing the requirement for Samarco engaging in protective measures (Chapter 6.4.3).

Thus, the narratives of the strategies adopted in the management of financial and operational risks suggested that practices that increase the financial risk of the shareholders were excluded, even if it would be a breach of environmental law, workers' protection or human rights compliance. This indicates substantial power of the shareholder value normative framework



over other social values such as safety and human rights. The narratives and actions that would decrease the dividends are dismissed and the way of dealing with both crises and the golden years is narrowed. As a result, during decision makings, the shareholder value is prioritised, while the protection of workers and the communities in the surroundings is performed inasmuch as it does not imply financial risks/losses.

In this case, the decisions, regarding the management of financial and operational risks, were made by the same Board of Directors. It follows that the risk management manifests the tension between human rights discourses and the market discipline at the organisational level precisely because *this space is in dispute*. The risk management is a space of dispute among different interests, which narratives include human rights discourses and the shareholder value (while a manifestation of the market disciplinary power).

On the other hand, the Company's guidelines on human rights presented many voluntary instruments, including the UN Global Compact. This falls under Evans' critique that legal approaches serve as a valuable tool to avert any query about human rights impacts. The formal presence of human rights guidance, and even a committee, are trusted to be taking care of human rights matters, offering a prompt answer to any questions of liability.

As a result of this tension, this study identified the financial sector as the main beneficiary of Samarco's operations. Through the financialization process (of owners and the market), the financial sector increases in importance and gains power over strategic decisions taken by Samarco. The financial sector then performs the role of provoking the financialization of Samarco, in a cause-consequence cycle. This study acknowledges that economic pressures over businesses practices are not new. But the financialization process seems to be *intensifying* these pressures and increasing the power of the market discipline at the organisational level to the extent that other values are completely silenced and ultimately off the table for consideration.

If business compliance with human rights standards before the financialization was a challenge, in a financialized firm, there is only one scenario: protective actions are taken inasmuch as they do not harm the shareholder value. The pressure is not only to maintain high dividends, but to *maximize them*. There is no limit to the discourse of *maximization*, which creates the conditions for human rights abuses whenever it "seems" necessary to cut essential safety measures. This is not necessarily the only reality of corporations, each carrying its specificities on risk management, but the literature and findings suggest a trend to be aware of.

In this scenario, human rights voluntary approaches seem weaker than they were before. They cannot offer pressure in a negotiation in which there is no dispute left; the shareholder value has narrowed the options. This case showed that when there was the real need for protection, the voluntary approaches did not protect; they were merely market-friendly discourses.

The voluntary approaches to business are insufficient and inadequate to provide protection. There is an urgency for binding instruments in business and human rights, like the one that is currently under consideration at the UN, as well as National Plans on Business and Human Rights. Additionally, further regulation on state duties is not to be disregarded, especially with respect to the responsibility of home States and cooperation among States. This study identified the financial sector as beneficiary; thus, there is a need for targeting it as well, in whichever policy regarding the private economic sector.

Moreover, human rights should not be confined to the legal realm because they have the potential for empowering political inquiries and becoming a tool for transformations in the business behaviour, including to the extent of endowing a new economic model to be constructed.

Therefore, I consider three courses of actions. The first one, already demonstrated, is that legal approaches remain as relevant developments for human rights protection, notwithstanding Evans' critique. However, these developments certainly do not question the social conditions for human rights abuses.

In this respect, this study found the risk management of the Company as the space of disputes between human rights and the market discipline, showing a structural pressure over Samarco's strategic decisions. The shareholder value, as a market discipline's discourse, was identified as the relevant instrument of power, which acted toward narrowing the Companies' narratives and practices over the years. There is a need for other narratives to contradict the shareholder value premises, and the acknowledgement of the shareholder value as a hazardous discourse already empowers new narratives to arise. Additionally, different authors claim for the transformative potential of human rights within and out of the legal realm, such as in cultural or political arenas. A critical and politicised human rights discourse, for its pursuit of uncovering power relations, is able to offer a counter narrative to the shareholder value inside organisations and in society.

Finally, by finding the source of power, this study also identified the moment in which choices are narrowed into harmful practices, bringing the attention back to the role people play in the

disaster and in taking collective risks. Dangerous choices were made in light of the shareholder value and of the normative framework of the market discipline, both abstract concepts. However, they were performed by a specific set of people in organisations: the ones dealing with risk management. It was not an accident and it was not inevitable. Be it by law and policies, by education, advocacy campaigning, strikes and so on, this awareness carries the possibility of struggles for changes in business' behaviour.

# Recommendations

This study provides recommendations on policy, practice and research, as follows:

## Policy

### **International level:**

Corporations must be accountable under legally binding instruments and mechanisms at the international sphere to widen the protection of society, a start would be the Human Rights Impact Assessment having legal binding effect and the creation of a compliance mechanism.

There is an urgency for the issue of the treaty under consideration at the UN IGWG (2015), and this study points to the relevance of proposals such as the clause of human rights law as hierarchically above corporate international law and the creation of a Human Rights International Tribunal.

Moreover, businesses' risk management needs to be addressed as human rights matter rather than a private matter, and the UN and other intergovernmental organisations should launch campaigns endorsing counter-narratives on the shareholder value maximisation strategies.

Awareness must be fostered in the academy, including within business, accounting and economic schools. The shareholder value maximisation discourse and practices must be challenged in debates and studies, until a mature political debate is built.

### **National level:**

The Brazilian State shall adopt a National Plan on Human Rights and Business, which should include educational measures for staff, managers and owners of high impact industries.

The National Educational Policy (*Política Nacional de Educação Superior*) and Regional Policies need to include Human Rights as an obligatory discipline for all professional areas that touch business risk management.

The Brazilian State is discussing the Brazilian Code of the Mining Industry (PL 37/2011) which text falls under the principle of non-retroactivity of human rights protections, for it is less protective than the one before. This text should be discarded and a new coding should be produced.

The Brazilian State shall engage in further dialogue with the social movements and consider their claims, among others, the adoption of a National Law in Protection of People Affected by Dams (*Política Nacional dos Direitos dos Atingidos por Barragens*).

## **Practice**

The Brazilian State must provide more resources for the Environmental supervisory organs, including professional resources and capacity to evaluate Human Rights Impact Assessments.

Samarco and other mining companies operating in Brazil, as well as companies involved in any great engineering, must promptly adopt Human Rights Impact Assessment of their present and future operations. The assessment should be performed by third parties publicly registered.

Samarco and other mining companies operating in Brazil, as well as companies involved in any great engineering, shall be aware of the harmful strategy of invisibility, or non-recognition of affected communities, and refrain of applying them.

Social movements and civil organizations would be empowered by considering the risk management as a space of dispute, and by regarding the financialization process in their actions.

## **Research**

Further study could better assess the risk management decisions in relation to intersectional oppressions; i.e., how strategic decisions were based on territorialities and ethnicity, gender, economic and social class, and so on, complementing the description of the disciplinary power in this case. There are already studies indicating the occurrence of environmental racism and class struggles.

There is the need for investigations about how the disaster impacted different ethnic groups and traditional communities, and what can be done to repair the damage and restore their livelihoods. Increase of violence against women, increase of economic vulnerability of groups, psychological traumas and cultural impacts are also lines for investigation.

Organisational studies could explore the organisational structures in depth and analyse the moments of decision making, unpacking the dynamics of narratives, discourses and disciplines. The role of the State regulations in determining the Company's behaviour is also a relevant investigation.

Finally, studies considering how the Company deals with the damage it caused are a substantial advance to the present research.

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# Appendices

## Appendix 1: List of Collected Data

### Organisational Reports

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## Legal Documents

### National

- AGU (Advocacia Geral da União), AGE-MG (Advocacia Geral do Estado de Minas Gerais) and PGE-ES (Procuradoria Geral do Estado do Espírito Santo) v. Samarco et al. (2015) Ação Civil Pública com Pedido de Antecipação de Tutela. Brazil Federation, Minas Gerais State and Espírito Santo State.
- MPF (Ministerio Publico Federal) v. Samarco et al., 2016. Denuncia. Minas Gerais State and Espírito Santo State, Brazil. 272 p. [pdf] Available at: <[www.mpf.mp.br/mg/sala-de-imprensa/docs/denuncia-samarco](http://www.mpf.mp.br/mg/sala-de-imprensa/docs/denuncia-samarco)> [Accessed February 2017]

MPF (Ministerio Publico Federal) v. Samarco et al., 2016b. Ação Civil Publica com Pedido de Liminar Inaudita Altera Pars. Minas Gerais State and Espirito Santo State, Brazil. ACP nº 23863-07.2016.4.01.3800. 359 p. [pdf] Available at: <<http://www.mpf.mp.br/mg/sala-de-imprensa/docs/acp-samarco>> [Accessed February 2017]

### **International**

Brazilian Civil Organisations (BCO) [Alexandre Bahia, Alexandre Rosa Rodrigues, Fórum Capixaba (Bruno Alves de Souza Toledo), Grupo Política, Economia, Mineração, Ambiente e Sociedade (Bruno Milanez), Conectas (Caio Borges), Caio Marçal, Coletivo Ame a Verdade (Elda Mariza Valim Fim, Simone Vieira), Fórum Capixaba (Eric Freitas Mazzei, Serguem Silva), Comitê Nacional em Defesa dos Territórios frente à Mineração (Jarbas Vieira), Sindicato Metabase (Juliana Benício), Coletivo Margarida Alves (Larissa Vieira), Movimento dos Atingidos por Barragens (MAB) (Leticia Oliveira, Tchenna Maso), Artigo 19 (Mariana Tamari), Justiça Global (Raphaela de Araujo L. Lopes), Grupo de Estudos e Pesquisas Socioambientais (GEPSA) (Tatiana Ribeiro)], 2016. (*Solicitação de Audiência Temática ao Secretário Executivo da Comissão Interamericana de Direitos Humanos*) *Afetações aos Direitos Humanos devido à Mineração no Brasil*. [pdf] 45 p. Available at: [http://www.conectas.org/arquivos/editor/files/informe\\_audie%CC%82ncia-minerac%CC%A7a%CC%83o%20revisado.pdf](http://www.conectas.org/arquivos/editor/files/informe_audie%CC%82ncia-minerac%CC%A7a%CC%83o%20revisado.pdf) [Accessed 20 January 2017]



## Appendix 2: Content Analysis References

<b>Subject or category</b>	<b>Reference</b>
<b>Samarco and Human Rights</b>	<b>Chapter 5</b>
UN Guiding Principles	Samarco 2005, p.9; 2006, p.13; 2007, p.19; 2008, p.12; 2009, p.31; 2010; 2011, p.14; 2012, p.25; 2013, p.31.
Mission, Values and Objectives Statement	Samarco 2005, p.10; 2009, p.24; 2010, p.15; 2011, p.14.
2002 Code of Ethical Conduct	Samarco 2005, p.10; 2006; 2007, p.19; 2008, p.69; 2009, p.24; 2010, p.24; 2014, p.20.
Millenium Development Goals	Samarco 2005, p.11; 2007, p.19; 2008, p.12; 2009, p.31; 2012; 2013, p.31.
Corporate Responsibility Report Guidelines	Samarco, 2005, p.9.
Global Reporting Initiatives Samarco	Samarco 2006, p.10; 2005, p.9.
Samarco's Integrated Management System for Quality, Environment, Occupational Health and Safety, and Information Security	Samarco 2005, p.10; 2006; 2007, p.19; 2010, p.15; 2011, p.14.
<b>Risk Management</b>	<b>Chapter 6</b>
Business risks	Samarco 2005; 2006, p.49
Financial risks	
Volatility of the market	Samarco 2014, p.21, 24; 2013, p.7, 18, 44, 48; 2012, p.8, 48, 49, 70; 2011, p.5, 41.
Iron ore price drop	Samarco 2014, p.24; 2013, p.7; 2012, p.8; 2011, p.5; 2009, p.15,17; 2008, p.3; 2006, p.20.
Demand drop	Samarco 2012, p.8; 2009, p.15; 2008, p.3.
Increase of competitiveness	Samarco 2014:24.
Market Opportunities	Samarco 2005, p.18, 2007, p.11.
Price increase	Samarco 2005, p.18; 2007, p.11.
Growing demand	Samarco 2010, p.10.
Decrease in competitiveness	Samarco 2010, p.10.
Operational risks	Samarco 2012, p.14,27.
Safety risks	Samarco 2005, p.36, 46,68, 107, 110, 114, 112; 2006, p.46, 106, 108, 112, 111, 2007, p. 68, 69, 120, 2008, p.28, 70, 71, 72, 73; 2009, p. 65, 66, 68, 2010, p.66, 70, 71, 73; 2010:15, 34, 36, 84; 2012, p.14, 21, 27, 32, 33, 37; 2013, p.18, 52, 54, 55, 57, 74, 2014, p.5, 9, 21, 58, 60.

Socio-environmental risks	Samarco 2009:85; 2005, p.68; 110, 2006, p. 18, 46, 72, 86; 2008, p.87; 2009, p.87, 2010, p.70, 102, 107, 111, 115; 2011, p.15, 47, 49, 53, 84, 2012, p.14, 21, 27, 33, 36, 38, 41, 54, 56; 2013, p.18, 62, 71, 74; 2014, p.21, 61, 62.
<b>Legal Positioning</b>	<b>Chapter 6</b>
Lack of responsibility	Samarco 2005, p.94, 2006, p.83; 2007, p.103; 2008, p.91, 92.
No pattern	Samarco 2009, p.101; 2010, p.117; 2011, p.52; 2013, p.53.
Vague information	Samarco 2011, p.52; 2012, p.89; 2013, p.53.

### Appendix 3: Name of BHP Billiton' shareholders in March 2017.

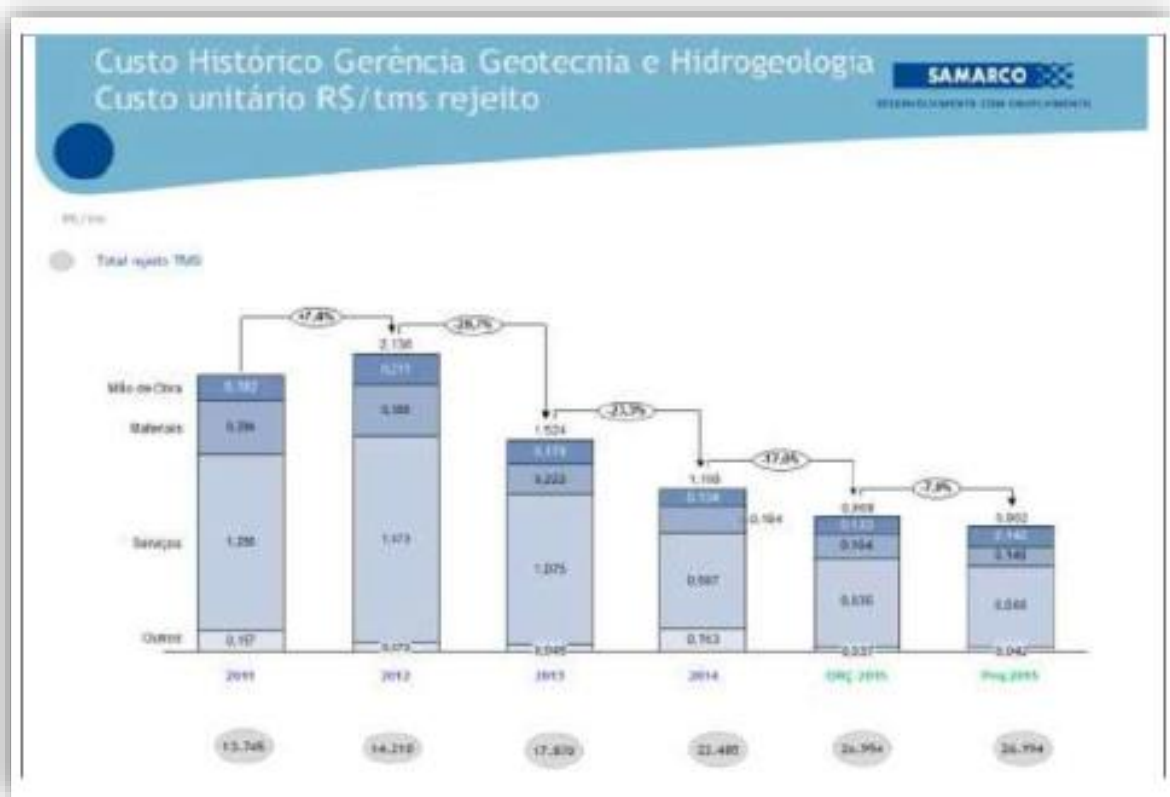
**List of BHP Billiton Limited:** HSBC Australia Nominees Pty Limited, JP Morgan Nominees Australia, National Nominees Ltd, Citicorp Nominees Pty, Citicorp Nominees Pty Ltd, BNP Paribas Noms Pty Ltd, Citicorp Nominees Pty Limited, Aust Mutual Prov Society, HSBC Custody Nominees (Australia) Limited, Australian Foundation Investment Company Limited, UBS Wealth Management, Computershare Nominees CI Ltd, HSBC Custody Nominees (Australia) Limited-GSCO ECA, BNP Paribas Nominees Pty Ltd, Argo Investments Limited, RBC Investor Services Australia Nominees Pty Limited, RBC Investor Services Australia Nominees Pty Limited, Navigator Australia Ltd, Bond Street Custodians Limited, Computershare Trustees Jey Ltd.

**List of BHP Billiton Plc:** PLC Nominees (Proprietary) Limited (2), Chase Nominees Limited, State Street Nominees Limited, The Bank of New York (Nominees) Limited, National City Nominees Limited, State Street Nominees Limited, Government Employees Pension Fund, Nortrust Nominees Limited, Lynchwood Nominees Limited, Vidacos Nominees Limited, Vidacos Nominees Limited, State Street Nominees Limited, HSBC Global Custody Nominee (UK) Limited, Industrial Development Corporation, BNY Mellon Nominees Limited, Nutraco Nominees Limited, Vidacos Nominees Limited, Nutraco Nominees Limited, Euroclear Nominees Limited, The Bank of New York (Nominees) Limited.

Source: BHP Billiton, 2017. Sustainability Report 2016. [pdf] Melbourne: BHP Billiton. 68 p. Available at: <<http://www.bhpbilliton.com/-/media/bhp/documents/investors/annual-reports/2016/bhpbillitonsustainabilityreport2016.pdf>> [Accessed April 2017].

## Appendix 4: Amplified Image 3

Image 3 – Rejects Cost Evolution 2011 - 2015



Source: Reproduction. Samarco Mineração *apud* MPF 2015, p.193.