

Strategies for reducing modern slave labor in the cattle supply chain in the Brazilian
Amazon

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Lists of acronyms

Animal Transit Forms - GTA

Brazilian Association of Real Estate Developers – ABRAINC

Brazilian Federation of Banks – FEBRABAN

Brazilian Institute of Environment and Renewable Natural Resources - IBAMA

Cattle Agreement - CA

Conduct Adjustment Agreement – TAC

Environmental, Social, and Governance - ESG

Federal Prosecutors Office - MPF

Federal Supreme Court - STF

Gibbs Land Use and Environment - GLUE

Gross Domestic Product – GDP

International Labor Organization – ILO

Market-driven initiatives - NSMDs Ministry of Labor - MTE

Ministry of Labor and Employment - MTE

Ministry of Labor established Special Mobile Inspection Groups - GEFM

Non-Governmental Organizations - NGO

Responsible Investment - RI

Rural Environmental Registry - CAR

United Nations – UN

Abstract

Slavery was abolished in Brazil in 1888, yet to this day not all workers in the country are assured dignity and *status libertatis*. Modern slavery in Brazil takes a variety of forms and the underlying forces that perpetuate these labor abuses are complex. Modern slave labor persists in cattle production in the Amazon and appears to be associated with deforestation. Unfortunately, there is cultural acceptance of modern slave labor among some cattle producers and tradespeople, and a reluctance to confront the wealthy, powerful actors who benefit from its persistence. International pressure has bolstered some domestic efforts to combat modern slave labor, e.g., via Cattle Agreements (CAs). Following a complaint within the Organization of American States, Brazil made a commitment to take a number of steps against modern slave labor. One of the measures was the implementation of official dirty lists that identify perpetrators. My dissertation sheds light on the modern slave labor problem in the cattle supply chain of the Brazilian Amazon and evaluates the achievements and limitations of efforts to reduce modern slave labor. I focus on the state of Pará, a region where cattle production is historically associated with modern slave labor. From 2003 to 2009, the highest numbers of the cases of modern slave labor in Brazil occurred in Pará and were related to cattle raising (Phillips and Sakamoto, 2012). These high rates modern slave labor in Pará warrant attention as do the initiatives against it, including public and supply chain initiative approaches. Working with the Gibbs Land Use and Environment (GLUE) group and with Brazilian experts, I analyze regulatory and market-based policies, identify key characteristics of properties involved in modern slavery, and discuss new actors to combat modern slave labor.

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Introduction

Slavery in the form of legal ownership of another person was widespread in Brazil starting in the 16th century until it was abolished in 1888. During this period, Brazil depended on slaves to produce sugar (16th and 17th century), gold (18th century) and cotton (18th and 19th century) (Naritomi, Soares and Assunção, 2012). Even though slavery was abolished in 1888, slavery-like conditions persist in certain sectors and regions of Brazil. For example, both rubber and coffee production (late 19th and early 20th century) involved labor practices that resembled formal slavery. Today, although perpetrators who practice slavery continue to treat the employee as goods, employers do not legally own workers as property. Brazil now seeks to ensure both dignity and *status libertatis* of the workers and the workers who are hampered to have these conditions receive the name of modern slave labors.

In Brazil, Pará is the state where modern slave workers are most concentrated – almost 30% of modern slave cases associated with cattle is found in Pará (Greenpeace 2009) and this has a historical explanation. During the rubber cycles (mid-19th to early 20th century and during the Second World War) there was “aviamento”; a form of debt peonage where employers controlled their workers by overcharging travel costs and work tools. In the 1960s, large cattle ranches (“latifúndios”) were created as a result of official policies to inhabit and develop the Amazon region. Simultaneously, formal resettlement programs on Amazonian lands led to massive migration to the region. Thus, landless migrants began to work in the large cattle ranches, opening pastureland for cattle raising. However, once on the cattle ranches, some workers were mistreated and imprisoned, showing a deeply unbalanced working relationship between employers and employees (Francelino-Goncalves-Dias 2011; Buclet 2005; Théry et al. 2012; Greenpeace 2009; Phillips and Sakamoto 2012; Magalhães 2012).

Today, labor abuses in the cattle supply chain persist and are sometimes amplified by international and national forces. Brazil has one of the largest cattle herds in the world (FAOSTAT 2011). The global demand for meat and leather spurs further pasture expansion and the recruitment of more vulnerable workers to clean the pasture (Phillips and Sakamoto 2012). In addition, agencies in Pará responsible for protecting laborers (e.g. the regional office of the Ministry of Labor) are grossly underfunded and understaffed, especially during the current administration. All these conditions appear to be worsening (IBGE 2020; Globo 2018).

Overall, my dissertation aims to advance our understanding of how some roles performed by public and supply chain initiative actors can improve or worsen the fight against modern slave labor in the cattle supply chain in Pará. In chapter 1, I present the public and supply chain initiatives to confront modern slavery in Brazil and analyze: how Brazilian government agencies confront forced labor in the cattle ranches of Pará; what are the supply chain market initiatives to confront modern slave labor in the cattle chain and among the supply chain initiatives, how cattle agreements (CAs) - MPF-TAC and Greenpeace-G4) differ and resemble in theory and practice; what are the weaknesses and strengths of each public and supply chain initiatives, and how are they connected. In Chapter 2, the focus is on cattle ranchers, and I assess the characteristics of properties identified as having modern slave labor within cattle supply chains in state of Pará and whether meatpacking companies that signed the CAs buy from direct suppliers linked to modern slave labor through the publicly available dirty lists, and whether their direct suppliers buy from indirect suppliers connected to modern slave labor. In Chapter 3, the focus is on discussing how banks can play their role in the fight against modern slave labor. I check which are the requirements related to modern slave labor banking institutions in Brazil ask for in order to grant credit to customers; whether the banks that follow Basel III recommendations become

signatories to the Equator Principles, the UN Principles for Responsible Investment, and the National Compact to Combat Modern Slavery and whether banks following the Basel III recommendations ask for more requirements coming from national standards than banks that are not signatories; then I look at whether Brazilian banks address modern slave labor in cattle production differently than in other activities.

Each chapter advances the research on combating modern slave labor in relation to different actors in the cattle supply chain. One contribution of chapter 1 is the discussion of how the public initiatives -- dirty list and criminal prosecution -- relate to each other and how each of these initiatives interrelate with supply chain initiatives. Chapter 2 contributes to studying the characteristics of cattle ranchers at the property level. Chapter 3 raises the debate about how banks are acting to restrict bank financing to clients who engage in cattle ranching. Throughout each chapter, these academic advances are aimed at public and supply chain initiative practitioners committed to combating modern slave labor.

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Chapter 1 - Using Public and Supply Chain Initiatives to Confront Modern Slavery: Lessons from Cattle Production in Pará, Brazil

Abstract

Cattle ranching is the major driver of modern slave labor in the Brazilian Amazon. Several public and supply chain initiatives have been implemented in the region to prevent the advance of modern slave labor among cattle ranchers. Among the public initiatives, there are dirty lists and the crime named “reduction to a condition analogous to slavery”. Supply chain initiatives include the zero-deforestation cattle agreements signed with the Federal Prosecutor's Office (MPF) and Greenpeace. However, there is still a gap in understanding in how public and supply chain initiatives to combat modern slave labor in the Brazilian Amazon cattle supply chain work in practice. In this research, I assess how Brazilian government agencies address modern slave labor on cattle ranches in Pará, what supply chain initiatives are in place to address modern slave labor in the cattle chain, what the weaknesses and strengths of each public and supply chain initiative are, and how they are connected. Our data included dirty lists, investigations reports produced by labor agents, criminal court decisions, and numerous documents that point to how MPF, Greenpeace, and slaughterhouses act to combat modern slave labor. Our results suggest that supply chain initiatives depend on government regulations and public initiatives guide the application of supply chain initiatives. However, the limitations found in each public initiative undermine the fight against modern slave labor and have consequences for supply chain initiatives. There is evidence that Greenpeace creates mechanisms to ensure that slaughterhouses seek to fully comply with the agreements. However, although the MPF is more rigorous than Greenpeace because it uses dirty lists and lawsuits to fight against modern slave labor, we found evidence that only dirty lists are enforced. I conclude that dirty lists are

recognition that the employer has practiced modern slave labor, meaning a violation of the worker's dignity and/or freedom and play the most important role in fighting modern slave labor among the initiatives studied. Among the supply chain initiatives, Greenpeace plays an essential role in fighting modern slave labor and the MPF has diminished its role by not using lawsuit checking to overcome the limitations of dirty lists.

Keywords: federal prosecutors, Greenpeace, slaughterhouses, Penal Law, dirty lists, modern slave labor

1. Introduction

In 1994, a century after chattel slavery was outlawed in Brazil, the Inter-American Commission on Human Rights heard a case (*José Pereira v. Brazil*) regarding slavery in the Brazilian state of Pará. This case, on behalf of a laborer named José Pereira who was shot in the face and left for dead when he tried to escape the farm where he worked, was not an example of a vestigial practice surviving in a backwater of the global economy, but of what Phillips and Sakamoto (2019) call “adverse incorporation” into global commodity chains. Brazil is the largest exporter and consumer of beef in the world and its cattle sector is dominated by large, multinational corporations. The exposure of that sector’s practices of modern-day slavery to an international audience was an embarrassment to a nation seeking to establish itself as a recovering democracy and an emerging economy, and in response, the government accepted responsibility and agreed to take active measures to eradicate all forms of degrading and forced labor.

Over the next decades, the Brazilian state introduced a number of initiatives, including setting up a National Commission to Eradicate Slavery, development of mobile investigatory squads that visited farms where allegations of slavery had been made, establishment of labor courts in affected areas, inaugurating a “naming and shaming” initiative called the dirty list that identified offending employers, and criminalization of the employment of workers “in conditions analogous to slavery.” Over the same time period, around the globe, multinational corporations were responding to growing criticisms of their labor and environmental practices by seeking to regularize their supply chains, often working in tandem with non-governmental organizations (NGOs). This was the case in Brazil as well, especially in the cattle-ranching regions of the Brazilian Amazon, where an initial concern with deforestation practices expanded to include

investigation and remediation of modern slave labor. Evaluation of how, and how well, these varied initiatives work has become a focus of scholarly inquiry.

The vast majority of studies of public initiatives against slavery in Brazil have described the state's programs and their intentions, tracking the promulgation and amendment of statutes and the intersection of government initiatives with international ones such as the conventions of the International Labor Organization (ILO). These accounts have discussed how Brazil's unique definition of "conditions analogous to slavery"—a definition that encompasses both degrading work conditions and loss of liberty—has shaped enforcement (Issa 2017). Issa (2017) found that conditions analogous to slavery means treating the worker not as a human being, but as a goods. Treatment as a goods means that the employer pays a low price for the employee's labor power, does not provide decent working conditions (e.g., drinking water, food, accommodation), does not pay wages, and creates debt arrangements with workers. When workers are treated as goods, the crime of reduction to a condition analogous to slavery may be in place by employers even if workers are not restrained. A few studies have attempted to measure the impacts of public efforts by tracking cases prosecuted, convictions obtained, and individuals freed from slavery (Mesquita 2016; Mendes and Mesquita 2019). The studies identified that in the case of conviction with an imprisonment order, employers appealed. In nearly 40 % of the appeals analyzed by the scholars, the court of appeals then reduced the final sentences of the employers from prison to community service and cash benefits.

In a similar way, research on Brazil's initiatives such as supply chain initiatives has delineated the various codes of conduct, certification schemes, voluntary agreements, and other instruments that corporations and NGOs have launched to address the problem (Feasley 2012; Gold 2015; Guéneau 2018). In a 2019 paper on slavery in Brazil's cattle sector, Emberson et al.

call for a shift from research on policies as they exist on paper to research on practice—or how those policies play out on the ground. This chapter takes up that challenge, presenting the results of a qualitative and quantitative case study of public and supply chain anti-slavery initiatives in the cattle sector of the state of Pará. It traces the processes through which state and supply chain initiative actors have enacted various anti-slavery initiatives, explores the strengths and weaknesses that have emerged at various steps in the process, and highlights the intersections (and interdependency) of the public and supply chain efforts.

Drawing on Ministry of Labor documents and reports, judicial opinions and reasoning, as well as legal and compliance outcomes, the chapter provides a process-oriented account of how the current array of public and supply chain efforts to end “conditions analogous to slavery” are faring.

In this chapter I address the following questions:

- How do Brazilian government agencies confront modern slave labor in the cattle ranches of Pará? More specifically, how does the Ministry of Labor compare with the Federal Criminal Court in terms of efforts to protect laborers’ rights?
- What are the supply chain initiatives to confront modern slave labor in the cattle chain?
- Among the supply chain initiatives, how do the implementation of the MPF-TAC and Greenpeace-G4 cattle agreements differ and resemble in theory and practice? How are supply chain initiatives linked to government initiatives?

2. Literature Review

Brazil’s cattle sector is well-integrated into global supply chains, and the vast majority of enterprises involved in modern-day slavery are larger enterprises – together their annual gross

revenue exceeds US\$58 million and rural properties involved with modern slave labor are big properties, counting with more than 1,000 Ha (Parente 2011) - producing for international markets (Costa 2009; Phillips and Sakamoto 2012, p. 305). As Phillips and Sakamoto have shown, livestock trade is driven by large meat-packing companies who vie for competitiveness in an increasingly concentrated sector, but rural producers are the most pressured link in the chain inasmuch they have the most economic hardship. For this reason, they argue, while the incidence of modern slave labor is too minor to directly to influence world commodity prices, it is a crucial strategy for some rural producers such as cattle ranchers, who see it as a way to maintain participation in intensely competitive markets (p. 307). Efforts to eradicate modern-day slavery in the cattle sector's supply chain confront the reality that, while the chain is globally driven, it is comprised of a combination of local and global actors facing different constraints and opportunities and possessing different degrees of power. These discussions of the role of slavery in Brazil's cattle sector echo broader accounts of modern slavery as an endemic feature of global supply chains (New 2015; Crane 2013).

A few interdisciplinary literature addresses the effectiveness of supply chain governance in attaining global environmental and human rights issues, considering the impacts of a wide range of supply chain interventions such as certification programs, training programs, and codes of conduct (e.g., Auld et al. 2009; Bartley 2014; Giessen et al. 2016; Pattberg 2007). Some researchers have argued that the private sector is well-positioned to confront modern slave labor both because firms already monitor their supply chains for other purposes and thus are more easily able to take preventive measures, and because they have greater resources than governments or NGOS and are more able to invest in solutions (Todres 2012).

Under international human rights law, states are the duty bearers and have undertaken certain obligations to protect the rights of citizens, including protecting against slavery. So, researchers argue that states must take the lead in addressing slavery because supply chain governance initiatives are not accountable to citizens in the same way governments are, that they do not have the same strong enforcement capabilities that states do, and that they lack transparency (or that they must proactively work to build it) (Seidman 2007; LeBaron 2020). Guéneau (2018), analyzing supply-chain initiatives to end deforestation in the Brazilian Amazon, suggests that supply chain governance initiatives tend to operate on the basis of neoliberal rationalities. By this he means that they seek to change behavior through persuasion rather than coercion and to appeal to the market rationality of key actors. They rely on market-based instruments (such as tradable pollution rights) as well as contracts, audits and certification, and benchmarking. While introduced by non-state market actors, he argues that these rationalities come to infuse the actions of the state as well.

As Guéneau's work suggests, initiatives rarely divide simply into public and supply chain --the real world of governance is characterized by various types of hybrid programs. Like global supply chains, governance is frequently an amalgam of local and global, public and private institutions that interact in complex ways (Ponte and Daugbjerg, 2015). Alves-Pinto et al. (2015), writing about deforestation and sustainability initiatives in the Brazilian Amazon, have argued that we need to analyze how social change initiatives interact with one another and with elements of their institutional, political, and economic context. They suggest that non-state, market-driven initiatives (NSMDs) may interact with state programs in three ways. In some cases, they may be *complementary*, producing additive or synergistic results; in others they may be *substitutive* (filling the same role); and in still others they may be *antagonistic* (constraining or undermining

one another). The Alves-pinto et al. article provides a helpful vocabulary and set of concepts for investigating public-private interactions, but it is focused on environmental governance. This chapter investigates whether the terms and concepts that Alves-Pinto and co-authors propose are adequate for an analysis of initiatives to eradicate modern-day slavery, where state laws are at issue and where courts perform important functions. That is, it seeks to establish if their model of interaction between public and private entities can be extended into an empirical context where the state plays a larger role. In addition, this chapter seeks to understand how public initiatives such as dirty lists and criminal proceedings interact and what is the profile of the violations committed by cattle ranchers to be included in the dirty list and be convicted of the crime of modern slave labor.

As recent studies have taken up the challenge to move from studying policies on paper to the way initiatives play out in practice, they have emphasized the need to shift from a “compliance mindset” to attentiveness to a broader set of political and corporate activities (Gold, Trautrim and Trodd 2015; Scherer and Palazzo 2011; Schrempf-Stirling and Palazzo 2016). This requires tracking and tracing not just the multiple intersections of public and supply chain initiatives, but also being attentive to the ways that programs operate within the business norms, political cultures, and legal frameworks of localities, and the ways these local norms interact with the distinct frameworks, cultures and norms of relevant global actors. Achieving this contextualized understanding of policy in practice is one of the goals of the process-oriented account that follows.

3. Methods

The research presented here relies, in large part, on a qualitative process-tracing strategy to describe, analyze and compare anti-slavery initiatives. To gain an overview of public

initiatives, I reviewed relevant labor law and penal code and the guidance provided to agents working for the Ministry of Labor and Employment (MTE). I examined MTE reports on investigations of allegations of modern-day slavery conducted between 2006 to 2016 – period when the data was available to me - , which included testimonies from employees, employers, and witnesses. I also read criminal prosecutions, including grounds for acquittal or conviction. To study supply chain initiatives, I analyzed the text of the voluntary cattle agreements and periodic progress reports and evaluations by the parties concerned, paying special attention to claims of compliance or non-compliance.

To gain a deeper understanding of the process and practice of public anti-slavery initiatives, I visited the Secretariat of Labor Inspection in Belém, the capital of Pará, to gather data on 40 cases of cattle ranches investigated for modern slave labor (2006 and 2016). For each of these cases, I first analyzed the administrative process conducted by the Ministry of Labor that resulted in a farm being placed on the official “Dirty List” of employers using modern slave labor. I was able to access infractions reports for each case and to extract and catalog all violations of labor standards. Next, I analyzed the criminal process that began when federal prosecutors brought charges against the employer. I was able to access criminal court decisions issued by the federal judges, to catalog each according to acquittal or conviction, and statute of limitations, and to analyze the judicial reasoning.

Based on these sources, I mapped the public sector administrative process (within the Ministry of Labor, e.g., the procedures and practices associated with the formation and maintenance of the dirty list). I tallied the examples of violations reported and analyzed which resulted in an employer’s inclusion on the dirty list. Similarly, I mapped the public sector

criminal process. I analyzed judicial decisions and the cited factors that led judges to acquit or convict.

To investigate the process and practice of the supply chain initiatives, I used Brazil's Access to Information Act to obtain the Terms of Commitment of the two main "cattle agreements" that address modern-day slavery. For each of these I analyzed the commitment agreement, and where relevant and appropriate, the terms of reference for Socio-Environmental Auditing, reports on the results of audits for purchases, and third-party audits. In order to compare the two instruments, I chose one slaughterhouse that had signed each agreement -- 1 slaughterhouse out of 4 that signed Greenpeace cattle agreement and 1 slaughterhouse out of 110 that signed federal prosecutors cattle agreements (Barreto et al. 2017) -- and analyzed their 2016 Sustainability Reports and audits.

4. Background and Context

Modern day slavery in Brazil's cattle sector, as in many other regions, was originally organized around debt, initially incurred as an advance on wages and on a worker's transportation to the farm. Landowners send agents, known as *gatos*, to regions with high unemployment and poverty rates to entice prospective workers with promises of good jobs. While this kind of debt bondage is strongly associated with poverty and lack of labor market opportunity, recent research has shown that it is not always the poorest of the poor who are recruited, but often the relatively healthier "working poor" from impoverished regions (Phillips and Sakamoto 2012). The initial debt owed by workers mounts as they are forced to consume food and supplies from the estate store. Where debt is not incurred, the employer may simply withhold wages until the end of the season to insure continued labor. The relative isolation of employer properties in remote areas increases the vulnerability of workers, and in some

instances, employers employ armed guards, violence, or the threat of violence to control workers (Costa 2009; Phillips and Sakamoto 2012; Issa 2017).

The crime of reducing an individual to a “condition analogous to slavery” was established in Brazil in 1940, but despite the law’s existence, Brazilian authorities denied that the crime occurred for many years, despite pressure from the ILO to define slavery as a crime and to address the issue (Costa 2009; Figueira and Sterci 2017; Ramos 2016). As previously described, it was only after a complaint made to the Inter-American Commission for Human Rights on behalf of José Pereira in 1994 that the nation began to seriously address the issue of modern slavery (Costa 2009). In 1995, the Ministry of Labor established Special Mobile Inspection Groups (GEFM), including specially trained and equipped labor inspectors, prosecutors and police officers, to investigate complaints of forced labor and to free workers. In 2003, following extensive litigation over the Pereira case, the government signed a conciliation agreement with the petitioners, agreeing to compensate Pereira and to prosecute those responsible for violating his rights, but also to establish new measures to fight slavery. These measures included developing a National Plan for the Eradication of Modern Slave Labor. They also importantly amended article 149 of Brazil’s Penal Code to clarify that an employer could be convicted of “reducing someone to a condition analogous to a slave” if workers were prevented from leaving due to debt, confiscating their papers, or other means, but also if they were subjected to overly long hours, debt bondage or degrading working conditions. The Brazilian Supreme Court has noted that the amended article’s objective goes beyond ensuring individual freedom to affirm human dignity and labor rights, adopting a definition of modern slavery that is broader than that contained in international conventions and most other national legislation.

Another important initiative taken in the wake of the Pereira settlement was the creation of the dirty list (Decree n. 540/2004)—a registry of employers who subject workers to slave-like conditions. The list is maintained by Ministry of Labor (MTE). Upon receiving a complaint – that can be done by anyone - about modern slave labor, the department assesses its credibility, and if it determines the complaint is legitimate, it sends a mobile inspection unit (GEFM) to the farm or packinghouse. Employers who are the subject of complaints are placed on a provisional “investigation list.” The GEFM team documents its findings in a comprehensive report and accused employers have an opportunity to present a rebuttal. An administrative body within the Ministry of Labor reviews the report and the employer’s defense and determines whether conditions analogous to slavery exist. If they determine that they do, the employer is placed on the dirty list, which is published on the Ministry’s website. Once included on the list, Ministry of Labor checks for two years whether an employer no longer use workers as modern slavers. If they have no recurring offenses and pay all fines, they are removed from the list at the end of that period. Brazil’s cattle ranches are over-represented on the dirty list. Amazon concentrates the largest amount of cattle ranchers caught using modern slave laborers (Phillips and Sakomoto 2012, pp. 293-94). During 2003 – 2016, the dirty lists published 815 cases of modern slave labor that occurred in Brazil; 272 of these cases were cattle-related, of which 215 were in the Amazon. The concentration of cattle-related cases in the Brazilian Amazon is consistent with the fact that they have had more cases reported, inspections performed, and workers freed than any other sector in Brazil.

The dirty list has implications for a cattle rancher’s firm’s access to capital. It has been used by financial institutions such as the Bank of Brazil, the Bank of Amazônia, the Northeast Bank and the Brazilian Development Bank to restrict convicted employers from loans and

services. The most serious potential consequence of being on the dirty list, however, is criminal prosecution. Federal prosecutors have legal authority to prosecute any employer who supposedly commits a crime. Dirty lists bring a list of employers who are potentially perpetrators of the crime of modern slave labor. So, federal prosecutors may file a criminal complaint against dirty listed cattle ranchers and the complaint will be separate from the initial administrative complaint adjudicated by the Ministry of Labor. Federal prosecutors take advantage of the investigative reports produced during the production phase of the dirty list and use that document to serve as evidence against the dirty listed employers. During the course of the criminal case, judges review the evidence produced by the federal prosecutors, including the investigative reports, and the cattlemen - who are defending themselves, to pass judgment. Criminal charges that result in conviction can be punished by imprisonment or fines.

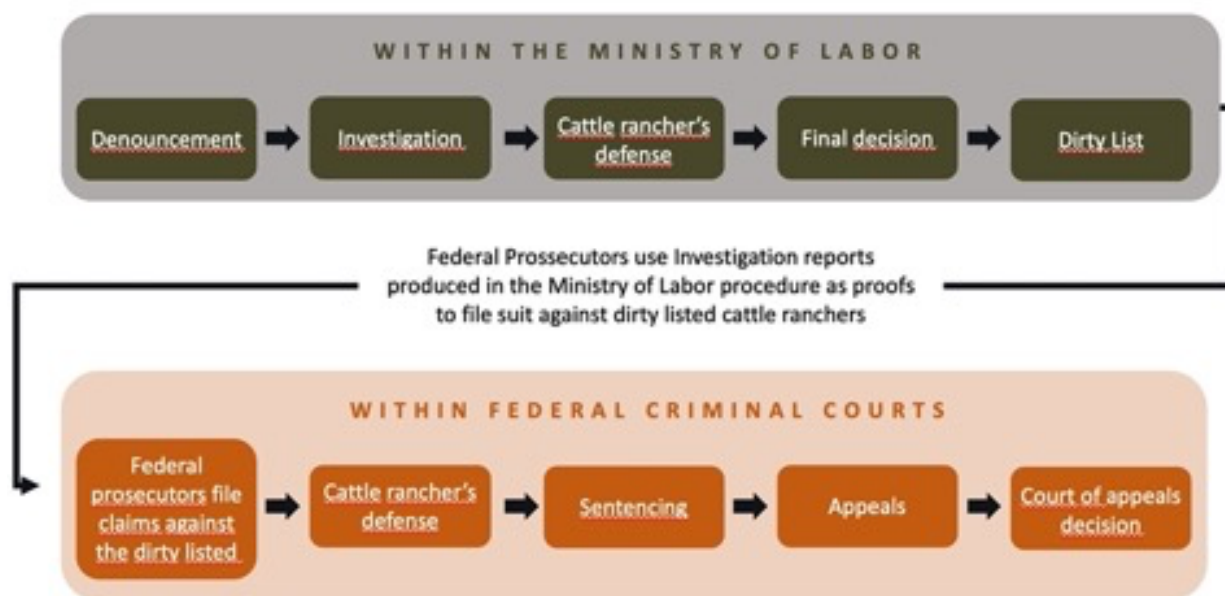


Figure 1. Summary of the procedure of public initiatives against modern day slavery

A new avenue for addressing modern slave labor began in 2009 out of a concern for deforestation. At this time, federal prosecutors and the Brazilian Institute of Environment and Renewable Natural Resources (IBAMA) filed lawsuits against slaughterhouses in the State of Pará that bought cattle from farms embargoed for deforestation (Gibbs et al. 2015; Gibbs et al. 2016). Federal prosecutors also threatened to sue retailers who continued to buy from these slaughterhouses. Then, that same year, the international environmental group Greenpeace released a report entitled “Slaughtering the Amazon” which further damaged the image of the cattle sector inside and outside the country and exposed terrible working conditions. This pressure resulted in the federal prosecutors signing an agreement with federally authorized slaughterhouses (those that are inspected and permitted to sell in domestic and export markets) that committed them to only buy cattle from farms that met both environmental and social requirements (the MPF-TAC agreement). It also resulted in Greenpeace negotiating a similar agreement with the four main meatpackers operating in Pará (Marfrig, Minerva, JBS, and Bertin)—all of which had been found to have modern-day slavery in their supply chains (Greenpeace 2009). This was known as the Greenpeace-G4 agreement.

The initial emphasis of both these agreements was to reduce deforestation associated with the cattle industry, but both also contained sections aimed at reducing the incidence of modern slave labor on farms. However, unlike deforestation, which can be monitored using satellite imagery, there is no technical monitoring system for modern slave labor that can substitute for in-person inspection by experienced investigators. Because such investigations are costly and time-consuming, the cattle agreements rely on the dirty list to identify suppliers who engage in modern-day slavery.

5. Public Initiatives: Actors and Processes

Public initiatives to address modern-day slavery have two main components: the administrative process of formulating the dirty list, and the prosecution of offenders under article 149 of the Penal Code, which criminalizes holding individuals in conditions “analogous to slavery.”

5a. Actors and Processes

Protocol within the Ministry of Labor

Public initiatives begin within the Ministry of Labor with the administrative procedure of formulating the dirty list (see Figure 2). Labor agents are crucial actors in this process. Decree No. 4,552/2002 gives labor inspection agents the authority to freely enter workplaces without notice, interview employers and workers, and draw up infraction notices that may lead to administrative penalties. To correctly identify and record violations, the agent must have a deep knowledge of general regulations, for workers (NR)¹ that establish health and safety requirements, and specific rules governing the safety and rights of rural workers (NR31). Labor agents must also be intimately acquainted with the worker protection norms for the cattle sector, such as expectations that the employer will provide potable water, shower facilities, and housing with raised floors and walls. The infraction record and the list of violated labor norms drawn up by the labor agent function as evidence in the adjudication of whether employers will be placed on the dirty list.

¹ Examples: Federal Constitution, article 7 (e.g., protection of wages in the form of the law, constituting crime its malicious retention, reduction of risks inherent to work, by means of health, hygiene and safety norms etc), Rural Regulatory Norms - NRR 4 (Personal Protection Equipment - PPE) and 5 (Chemical Products), and Regulatory Norm NRR 12 (Safety at Work in Machinery and Equipment).

Administrative Procedure

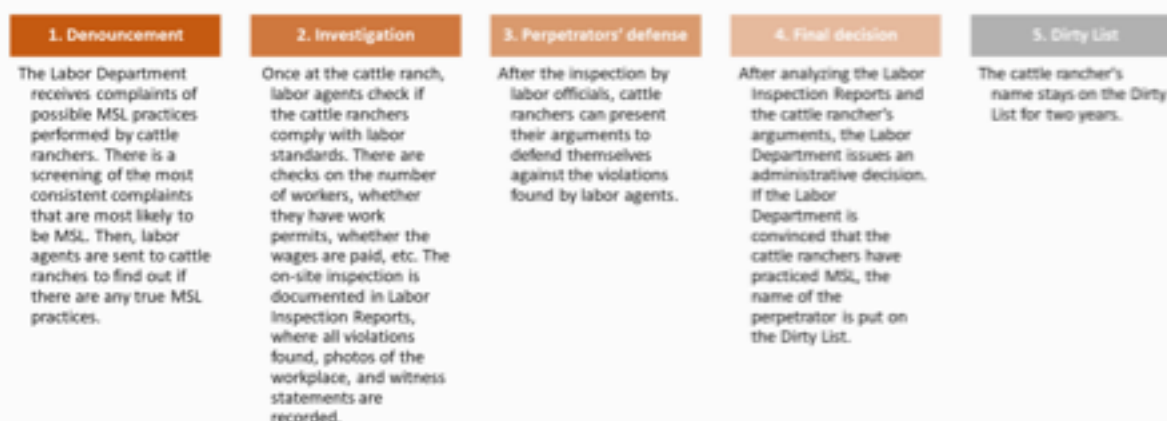


Figure 2. Summary of the Administrative Procedure steps of the Ministry of Labor.

Protocol within Federal Criminal Courts

The Brazilian Federal Constitution established that federal judges are responsible for deciding cases regarding violation of human rights, including those involving conditions analogous to slavery (see Figure 3) - Article 149 of the Penal Code. The federal judge must consider the four possible manifestations of modern slave labor (degrading working conditions, debt bondage, long working hours, and forced labor) to determine whether the employer has restricted the employee's freedom. After hearing from the accuser, usually the federal prosecutor (MPF) and the accused employer, the judge reaches a decision that explains the grounds used to acquit or condemn the defendant of violation of Article 149 and imposes a sentence. The published judicial decision includes the judge's reasoning in reaching this decision. But not everyone on the dirty list gets criminal charges brought against them.



Figure 3. Summary of the Judicial Criminal Procedure steps.

5b. The Process in Practice: Examples of Violations

The preceding paragraphs describe the administrative process for creating the dirty list and the judicial process for prosecuting employers as these exist on the books. Now I will turn to an in-depth analysis of how these public sector initiatives work in practice. Before presenting my analysis, I need to explain methodological issues related to the data set I used. My original plan was to analyze inspection reports for 150 cases listed on the Department of Justice website. As described below, while I could access outcomes for all of these cases, I was only able to obtain complete inspection reports for 40 cases. Before proceeding, therefore, I needed to assess whether the set of 40 cases matched the larger sample on important characteristics.

Administrative Review by Ministry of Labor and Federal criminal Courts

I used all 40 cases to evaluate the types of violations committed by cattle ranchers if they were dirty listed. Next, I used a subset of 25 cases out of the 40 to analyze the criminal Court decision, because the remainder (15 cases) were still pending. Although I did not have investigation reports for the 110 cases, I investigated whether these cases were dirty listed and the outcomes of criminal court decisions. To find out whether the 110 cases were dirty listed, I checked on line – using Google website - if the names of the employers were published in any dirty list. To also know the outcome of the criminal court from the 110 cases, I used the "procedural consultation" tool available at the website of the Federal Court of the state of Pará (trf.jus.br). Thus, I was able to track which of these 110 were dirty listed under the Ministry of Labor procedure, and the respective decisions for each case at the criminal sentencing level.

To consider potential bias in my sample, I first compared the 40 cases for which I had full access to the investigation reports to the 110 cases for which I did not have access to investigation reports, but I had partial information in terms of Court outcomes, time to court adjudication (Table 1), and location of ranch (Table 2). I chose these factors because they were all available information in for all cases. Out of 110 cases of investigated cattle ranchers, 83 (75.4%) were sentenced, 19 (17.3%) had no sentence yet, and in 8 (7.3%) I did not find any lawsuit filed against cattle rancher. Among 83 cattle ranchers with sentences, 44 (52%) were acquitted, 30 (36.1%) were convicted and 9 (10.8%) exceeded the statute of limitations². Of the 40 cases analyzed with investigation reports, 15 (37.5%) have not yet had a sentence and 25

² Statute of limitations refers to cases where the state has lost the right to punish the cattle farmer because it has not responded within a time limit established by law. Before judging whether cattle farmers are guilty or not of the crime of art. 149 of the Penal Code, the judge must analyze whether the time limit for the trial is still valid. The maximum penalty someone may have for committing the crime of art. 149 of the Penal Code is 8 (eight) years. The Penal Code states that for crimes with a maximum sentence of eight (8) years, the state has a period of twelve (12) years to try the accused. However, the period is reduced to six (6) years when the accused has already reached the age of 70 on the day the judge issues the judgement. The initial day for calculating the statute of limitation on the crime of art. 149 of the Penal Code is the day the judge receives the prosecutor's indictment, and the final day is the day the judge holds a judgement.

(62.5%) have had sentence. Among those sentenced, 12 (48%) were acquitted, 7 (28%) were convicted and 6 (24%) exceeded the statute of limitations. I additionally compared the criminal outcome, average and range of time that the larger group of 110 cases and the study group of 40 cases required to be sentenced. I considered each case to begin in the year of the investigation of the cattle rancher and to end in the month and year of the sentence. I found no difference in the length for the 40 full cases versus the partial cases (Welch's t- Test of 0.6320). Similarly, I tested the court outcome of the partial versus full set and found no significant difference (Contingency Analysis, Pearson of 2.860).

Table 1. Sentencing results and time to court decision in cases with (40 cases) and without investigation reports (110 cases)

	Lawsuits not found	In progress (without sentencing)	N. of investigated with sentence			Average lifetime period between Investigation - sentence		
			Acquitted	Conviction	Exceed Statute of limitation	Acquitted	Conviction	Exceed Statute of limitation
Cases without inspection reports (n= 110)	8 (7.3%)	19 (17.3%)	83 (75.4% of 110)			6.8 years		
			44 (53% of 83)	30 (36.1% of 83)	9 (10.8% of 83)	7.1 years	5.9 years	7.9 years
Cases with inspection reports (n= 40)	0	15 (37.50%)	25 (62.5% of 40)			7.2 years		
			12 (48% of 25)	7 (28% of 25)	6 (24% of 25)	5.7 years	7.6 years	9.7 years

Last, I compared the subset of 40 with the 110 cases in terms of geographic location. In total, the 150 investigated cattle ranchers were spread over 46 municipalities, 50% of which were concentrated in ten Municipalities. In Table 2, I show the proportion of investigated cattle ranchers in the set of 110 and 40 in the 10 municipalities. I have investigation reports for 80% of the municipalities that investigated cattle ranchers in Pará.

Table 2. Top Ten Municipalities found in Full and Incomplete Records of Labor Violations.

Municipality	Total of investigated cattle ranchers out of 150	Total from missing or incomplete reports, n= 110	Total from full reports, n= 40
São Félix Do Xingu	24 (16%)	20 (18%)	4 (10%)
Marabá	12 (8%)	8 (7.2%)	4 (10%)
Goianésia do Pará	8 (5.3 %)	8 (7.2%%)	0 (0%)
Novo Repartimento	8 (5.3 %)	7 (6.3%)	1 (2.5%)
Pacajá	8 (5.3 %)	7 (6.3%)	1 (2.5%)
Itupiranga	7 (4.6 %)	4 (3.6%)	3 (7.5%)
São Geraldo Do Araguaia	6 (4%)	6 (5.4%)	0 (0%)
Ipixuna do Pará	5 (3.3%)	4 (3.6%)	1 (2.5%)
Paragominas	5 (3.3%)	3 (2.7%)	2 (5%)
Abel Figueiredo	4 (2.6%)	1 (0.9%%)	3 (7.5%)

The sample sizes are too small for inferential statistics but there appears to be a similar geographic distribution among the full and incomplete reports (n=40 and n=110, respectively). In sum, there is no evidence that the subset of forty complete records I accessed differs from the other 110 cases in terms of length of judicial decision, judicial outcome and location of reported infraction. Nonetheless, the sample sizes are small, and caution is warranted in extrapolating my findings.

5c. The Process in Practice: Who Is Included in the dirty list?

Having established the comparability of the sample to the entire set of cases, I analyzed types of violations, with the goal of discovering which kinds of violations were most likely to lead to an employer being placed on the dirty list. Inclusion on the dirty list is recognition that the employer has practiced modern slave labor, meaning a violation of the worker's dignity and/or freedom.

Analyzing the 40 full investigation reports, I found a total of 92 different examples of violations registered by the inspectors. I grouped the 92 examples into three categories of violations loosely following (Fazenda Brasil Verde versus Brasil case (closing statements) (Humanos 2016), Brito Filho (2004, p. 13) and Labor Public Prosecutors' Office (Ministério Público do Trabalho 2021). The first category is about *violation to Employment Law* and it includes employers who have not fulfilled the basic obligations of the employer-employee relationship. Examples of such obligations are payment of wages, proper payment of overtime, and rules for keeping employee records. The second category includes violations *to the dignity and freedom of the worker*. This category includes actions that deny humans basic rights and diminish them to the “condition of goods.” It includes failure to meet minimum guarantees of health and safety in conditions of work, housing, hygiene, respect and food (Brito Filho 2004, p.

13). The final category of violation was “*offense against children.*” This concerns hiring workers under age 16. See Appendix 1 for full details on offenses recorded in cases. The second two categories (violations to the dignity and freedom of the worker, and child labor) are more serious.

Out of the 92 different examples of violations, 70 were violations of the dignity and freedom of the worker, 20 were related to the category of violation of the Employment Law, and 2 were examples of violations against children. The violation to the dignity and freedom of the worker leads to the understanding that the employer practiced modern slave labor, and that therefore, the employer should be on the dirty list.

The 40 Investigation reports and the dirty lists do not use the three classifications above. However, the classification is important because violations related to the Employment Law will have a special analysis when criminal judges analyze the crime of reduction to a condition analogous to slavery. The 70 examples of violations found in the classification regarding the violation of the dignity and freedom of the worker help to understand which manifestation of modern slave labor was most practiced (degrading working conditions, debt bondage, long working hours, and forced labor) in the 40 investigation reports. Degrading working conditions are those which violate the dignity of workers through (e.g.) lack of toilets, water, and accommodation. Long working hours occur when there was work of ≥ 15 hours/day. Forced labor include instances when the employee was forced to (e.g.) work at gunpoint or under some threat to physical harm. Debt bondage occurs if the employer violated the worker’s freedom through using debt to prevent them from leaving the cattle ranch. Within the 40 reports, I found 67 examples of violations that would be degrading working conditions, 2 of debt bondage, and 1 of long working hours.

Among the violations under the category of violation of the Employment Law, I found that the most common violation was to employ or keep employees without record that workers were hired by the cattle rancher. This violation was reportedly committed in 36 investigation reports. Among the violations in the category dignity and freedom of the worker, the most common violation was failure to provide personal protective equipment. This violation was committed in 27 investigation reports. Offense against children was discovered on 6 inspection reports.

Next, I compared the administrative procedure outcome (whether the employer was or was not placed on the dirty list) for employer with different numbers and examples of violations (Table 3). Not surprisingly, I found that the cattle ranchers with the highest number of violations were the ones that were listed the most on the dirty list. I also found that the cases that violated both the Employment Law rules and the dignity and freedom of the worker category were most likely to be placed on the dirty list.

Table 3. The most frequent examples of violations grouped into three violation categories compared to the decision of the administrative procedure to put ranch on the dirty list or not.

Violation category:	I. Violation to Employment Law		II. Offense against the dignity and freedom of the worker		III. Offense against children	
	Most frequent:	2 nd most frequent	Most frequent:	2 nd	Top 1	2 nd
Examples of violations	“Employ or keep employees without record in a book, file or electronic system”	“Failing to record the employee's work permit ≤48 hours from the start of work”	“Failure to provide personal protective equipment”	“Failure to ensure medical examinations for admission of workers”	“Employ workers under the age of 16”	“Hinder an employee < 18yrs from attending school”
Administrative Judgement						
Dirty Listed (n=25)	24 (96%)	18 (72%)	20 (80%)	17 (68%)	5 (20%)	0%
Not Listed (n=15)	12 (80%)	9 (60%)	7 (46.6%)	10 (66.6%)	1 (6.6%)	1 (6.6%)

To summarize, 60% of the 40 cases were dirty listed by the Ministry of Labor. The Criminal Courts meanwhile convicted only ~48% of the cases they reviewed. My sample sizes are too small to draw statistical inference, but it appears that the Criminal Courts are more conservative about judging a ranch guilty of practicing modern slave labor. A closer look is warranted at the judges' deliberations in the criminal courts.

5d. The Process in Practice: Violations, Dirty List and Criminal Trial Outcomes.

Of the 40 cases for which I had in-depth information, twenty-five were sentenced in the criminal court. In total, eleven different judges were involved in these criminal court cases. Of the 25 cases that judges gave decisions, eleven were acquitted, seven convicted and six lacked decisions because they exceeded the statute of limitations. Of these 25 cases that went to criminal court, eighteen had been dirty listed. The seven that were not dirty listed in the administrative procedure were all acquitted or exceeded the statute of limitations when their cases came to criminal court. Of the eighteen dirty listed cases, six were acquitted, seven were convicted, and five exceeded the statute of limitations in the criminal court. In their rulings, no judge recorded whether a cattle rancher was dirty listed or indicated whether this factor shaped his decision to acquit or convict a cattle rancher.

I next explore how the category of violation was associated with sentencing in the criminal procedure. Generally, violations of Employment Law (Category I Violations), by themselves, were not enough to convict someone. Federal judges seemed to give more weight to violations of the dignity and freedom of the worker (Category II Violations). All seven criminally convicted cases included these violations. Yet despite the frequency of prosecutions of violations of the dignity and freedom of the worker, there was significant ambiguity surrounding offenses of this type. Judges are free to interpret whether offenses found by labor

inspectors harm dignity and freedom of the workers. So, some judges may consider failure to provide sanitary facilities to workers, for example, as a violation of dignity, while others may not. It is difficult to draw conclusions about the importance of offenses against children (Category III Violations) because only 6 ranches were found to have this type of violation.

In making these decisions about violations of the freedom and dignity of the worker, judges make reference to Article 149 of the Penal Code - which covers the four possible manifestations of modern slave labor in Brazil (degrading working conditions, debt bondage, long working hours, and forced labor). For example, the judge must decide if there has been a violation of dignity when a cattle rancher did not provide toilets, water, and accommodation to the workers (degrading working conditions), if there was work of fifteen hours/day (long working hours), and if the employee was forced to work at gunpoint (forced labor). In addition, the judge must decide if the employer violated the worker's freedom through the use of debt bondage to prevent the employee from leaving the farm. The content of Article 149 gives additional weight and definition to the category of violations of the dignity and freedom of the worker. Of the eighteen sentencing decisions where a judge discussed whether there was a violation to dignity or freedom, they only made reference to degrading working conditions and debt bondage, and no instances where they discussed forced labor and long working hours.

These judgments about "violation of the dignity and freedom" of the worker have been a subject of great debate in Brazilian legal communities. The concept is not defined clearly in law and different interpretations can lead to conviction or acquittal. My review of cases indicated that judges who convicted discussed restriction of freedom and dignity of the worker. However, the judges who acquitted only addressed violation of the worker's dignity, without mentioning freedom. The language of the acquittals showed that judges understood restriction of freedom to

mean the existence of indebtedness and physical restrictions on the employee's freedom to come and go. To qualify as restriction of freedom, judges argued that there must proof that workers have made purchases in the ranches' stores at high prices. In addition, they took advance payment of wages as proof that there was no indebtedness, and ability to leave the ranch as evidence that there was no debt bondage. They argued that debt bondage does not occur if the employee received wages, even if late payment, and even if not in the full amount owed them.

Here are a few examples of this reasoning from a criminal court in Pará, identifying details are excluded to respect individual privacy.

At first, it is difficult to question the existence of human subjugation due to the indebtedness of the workers. It is observed from the testimonies enrolled and from the inspection reports that, although the salaries were paid only at the end of the job, the workers received partial advances, subtracting the constructive element of indebtedness. Although this practice does not exclude the presence of a labor infraction, it certainly weakens any element of servitude.

It is also evident that no passbook of accounts or any other accounting mechanism was seized, which would have proven the indebtedness of the worker to the point of constituting an obstacle to his leaving the farm until, through labor, he could settle the account. Equally absent is proof of any element of threat or limitation on movement, under any condition imposed by the employers, preventing the worker from quitting the job and then deserting his employment contract. In this regard, the testimony of the prosecution's witness, Person x, is noteworthy, according to which the employees did not mention that there was any restriction of freedom

Moreover, the workers themselves reported that the material was purchased at a shop in town, because there was no warehouse on the farm, not demonstrating that such goods were transferred to workers at above market price.

(...)

It should also be pointed out that in statements on page 63, the victim João Batista Pereira da Silva stated that he was not physically prevented from leaving the farm and that none of the workers was in debt to the farm.” (Case 1, 2010, pages 3 and 4)

[T]here is no material evidence ...in the records, such as any type of document, even if simple debt notations, sufficient to demonstrate the use of the sale of products at abusive prices or the coercion to purchase food and equipment in the supposed labor bond for debt....In the concrete case, given the inadequacy of the way in which the products were made available for onerous acquisition by the workers, the conduct may be reprimanded in the administrative sphere, as effectively occurred in the situation, but it is

insufficient to characterize criminal practice, reason for which I consider the imputation for criminal purposes not proven." (Case 2, 2009, pages 6 and 7)

In truth, the facts portrayed are not sufficient to characterize the crime of reduction to a condition analogous to slavery. The indictment does not discuss any circumstance that reveals compromising the freedom of the workers, whether through servitude or submission and restriction of their decision-making power. Even the testimonies given at the time of the inspection and in court do not show, for example, any evidence that these workers had their will curtailed, or any indication of lack of acquiescence in relation to the condition in which they were. (Case 3, 2012, page 2)

In acquittal decisions, two arguments regarding violations to dignity of workers prevailed. For some judges, there is violation of the worker's dignity when cattle ranchers disrespect a large number of minimum conditions of health and safety, hygiene, food and respect. However, there is no consensus on what constitutes minimum conditions for decent work. Some judges cite scholarship suggesting that lodging in subhuman conditions (e.g., canvas shacks), lack of gender-appropriate accommodations, lack of adequate sanitary facilities, precarious health and hygiene conditions, or lack of drinking water and scarce food constitute violations. Convictions seem to require "many" violations of the minimum conditions, despite the fact that no law or policy defines what "many" means.

In the present case, as concluded from the assessment of the facts imputed to the Accused, it has not been proven that there was omission to pay wages, enticement of workers, restriction of freedom of movement, maintenance of armed surveillance, existence of physical or moral coercion, imposition of an exhausting work day, nor the existence of debt bondage, which are, without a doubt, the most effective ways of enslaving workers.

On the other hand, the effective circumvention of labor rights resulting from the maintenance of an employment relationship without the registration and payment of all its commitments was proven... Several infraction notices were issued regarding the administrative irregularities detected (pages 32/49), as well as the submission of workers to a work environment that lacked adequate hygiene and health conditions. These facts, however, taken separately, do not have the power to characterize the subsumption of the conduct to the criminal type ... In this context, it cannot be legitimately affirmed that the working, housing, safety and health conditions to which the workers were subjected have

damaged their dignity in such a way as to require the intervention of the Criminal Law, which, as is known, is the ultima ratio. Therefore, it is necessary to understand that the infractions of the medicine, health and safety norms at work have been sufficiently repressed through the application of administrative penalties foreseen in the labor legislation itself. (Case 4, 2009, page 11)

The acquittals also addressed the legal interpretation of “treating workers as goods” (Article 149 of the Penal Code). To constitute a crime, many judges indicated in their decisions that they consider that cattle ranchers must *intend* to subject the worker to degrading conditions and also to abuse their economic power. However, they found there was no intent if the cattle ranchers were just reproducing the poor lifestyle of the rural laborer. These decisions were interesting in that they disregarded existing regulatory norms about how workers should be treated, either as human beings or as employees, and did not reference scholarly or legal thinking about minimum conditions of health, hygiene, food, and respect, or duty to provide adequate accommodation, personal protective equipment, etc. Instead, they took prevailing conditions in the countryside as a metric against which to compare conditions for workers on the ranch. Therefore, according to this argument for acquittal, as long as there is poverty in the region, cattle ranchers that replicate those poor conditions do not commit a crime because they cannot be shown to have the intention to treat workers like goods.

Unfortunately, [lack of] basic sanitation conditions and access to drinking water in this region of the country, especially in its interior, is the reality of the great majority of the low-income population, not verifying in and of itself the findings of the labor inspectors that they constitute degrading working conditions. (Case 5, 2016, page 5)

Therefore, if judges find there are not many violations of the minimum conditions of health, hygiene, food, and respect, they can fail to find cattle ranchers guilty on the grounds that the conditions to which they subject workers are the norm for the region.

In several convictions, however, judges cited the section of the Penal Law that calls for sanctions for employers when: (i) there is an imbalance between the cattle farmer and the rural worker, or (ii) when the workers are treated as goods. In 3 of the 7 convictions, the judge highlighted that there is such an imbalance when rural workers are illiterate, poor, and live on the margins of society without a better perspective of life; who are humble people whose intention was to guarantee their own subsistence, but who, due to lack of options, accepted the working conditions. Cattle ranchers, in turn, take advantage of those vulnerabilities and subject rural workers to no minimum health, hygiene, safety and food conditions. The cattle rancher's intention is personal enrichment rather than promoting the financial autonomy of the workers. The result of the imbalance is the restriction of workers' self-determination, which prevents them from putting an end to the exploitation to which they have been subjected.

(...) I am convinced that, in addition to disrespecting dignity of these workers, X has demonstrated that he has acted in a selfish manner, aiming only at his own enrichment and business prestige, without revealing concern about the kind of treatment given to these people, because he had discerned that, as a rule, they are uneducated, poor, disadvantaged, neglected, marginalized by society and without greater prospects of life improvement. (Case 6, 2007, page 15)

I found that in four convictions, judges made the argument that rural workers are treated as goods when cattle ranchers do not provide the minimum decent conditions for human labor (e.g. they do not provide sanitary facilities and drinking water) and when workers do not have the opportunities for self-determination themselves that other citizens do.

Furthermore, the conditions in which the 28 workers of the locality called Riozinho do Anfrísio worked, without a doubt, provide a classic example, since they subjected people to work in shacks without any protection, without the minimum necessary to develop their activities and in subhuman conditions, signifying the loss of the personalities themselves, when they are treated simply as goods, depriving them of

minimum fundamental rights. Human freedom was fully nullified in the scenario imposed by the employer. (Case 7, 2007, page 13)

In all the situations listed above we see a great imbalance of forces, which goes beyond the mere subordination that stigmatizes the employment relationship. There has been abusive exploitation of the labor force and, more than deprivation of freedom of movement, the workers' freedom of self-determination has been hurt, through which they might put an end to the exploitation to which they were subjected.

In these conditions, the human being was maliciously and abusively submitted to all kinds of humiliation and privations, as if they were not even human, and all in the name of greed, profit.

It should be emphasized that the fact that poor and humble citizens accept submission to such undignified conditions - which they do because of the absolute lack of an alternative to guarantee their own subsistence - does not authorize others, taking advantage of their privileged position as holders of knowledge and economic power, to literally profit from the misery and misfortune of others.” (Case 8, 2010, page 9)

6. Supply chain Initiatives: Actors and Processes

There are two initiatives involving the meatpacking sector that aim to reduce deforestation associated with cattle sector but also include provisions to address modern slave labor. These initiatives were designed by two different actors have intersect in many ways. The first, is the Conduct Adjustment Agreement led by the Federal Prosecutors (MPF-TAC). The second is Greenpeace-G4 signed with the Brazil's largest slaughterhouses-Marfrig, Minerva, JBS, and Bertin)-the G4.

6a. Actors and Processes

Protocol within MPF-TAC

These two supply chain initiatives I studied, have different actors and follow different procedures (see Figure 4). The Federal Prosecutors are Brazilian public officials who enforce the law and ensure the protection of the public interest, are the main actors for the MPF-TAC. The Federal Constitution (article 127) gives the Federal Prosecutors the authorization to file criminal and civil lawsuits against those who do not comply with the law and to act preventively, extrajudicially, to avoid violating the public interest. The cattle agreements proposed by the Federal Prosecutors are part of the preventive action in the fight against modern slavery that has materialized in the signature of the MPF-TAC with municipal, state and federal slaughterhouses companies. The MPF-TAC has two requirements for firms (i) that they not be on the dirty lists and (ii) that they not acquire cattle from any ranches in the State of Pará where the Federal Public Prosecutor's Office (MPF) has filed criminal or civil lawsuits against their owners, managers or employees for the practice of modern slave labor. However, even though the MPF-TAC has been an important advance in the fight against deforestation, with concerns against modern slave labor as well, there are flaws in the enforcement of the agreement. There was, for example, a four-year delay in the audit scheduled for the first year of the agreement (Barreto and Gibbs 2015).



Figure 4. Summary of the MPF-TAC provisions related to modern slave labor.

Protocol within Greenpeace-G4

The Greenpeace-G4 agreement involves the non-governmental organization Greenpeace and the four largest slaughterhouses in Brazil (Marfrig, Minerva, JBS, and Bertin)—the G4 (see Figure 5). Through an impactful report “Slaughtering the Amazon” (Greenpeace 2009), Greenpeace pointed out that the cattle sector was a major driver of Amazon deforestation in the world, and for the first time identified which companies were connected to this deforestation as well as connections to modern slave labor in the cattle supply chain. This report created public pressure that led the main meatpackers in Brazil - the G4 - to sign the Zero-Deforestation Cattle Agreement with Greenpeace. The G4 companies own slaughterhouses with the federal inspection needed to sell cattle outside the state to other parts of Brazil or to other countries. Under the G4, companies agreed to not to buy from farmers on the dirty list.



Figure 5. Summary of the Greenpeace-G4 provisions.

6b. The Process in Practice: Results from Analysis of Outcomes of Supply Chain Initiatives

I will now analyze how these actors apply each supply chain initiative by studying some files produced for the MPF-TAC and for Greenpeace-G4. To find out how federal prosecutors, Greenpeace, and slaughterhouses comply with the provisions of MPF-TAC and Greenpeace-G4,

I chose to analyze one federal slaughterhouse that signed both MPF-TAC and Greenpeace-G4 agreements; and one federal slaughterhouse that signed only Greenpeace-G4.

To analyze the MPF-TAC, I analyzed an agreement signed between the state of Pará and the Federal Prosecutors, the term of reference (scope of services) for Socio-Environmental Auditing issued by the Federal Prosecutors, and the 2016 and 2017 audit reports. The procedures adopted by municipal, state, and federal slaughterhouses that subscribe only to the MPF-TAC were not considered because I did not have access to data from slaughterhouses subscribing to the MPF-TAC only. Regarding the MPF-TAC, the slaughterhouses signing both agreements and the federal prosecutors look only at the dirty list, even though the MPF-TAC also stipulates that there should be no trade with cattle ranchers with civil or criminal lawsuits.

To analyze Greenpeace-G4, I analyzed the meatpacker signing both agreements, now focusing only on Greenpeace-G4 and another meatpacker signing only Greenpeace-G4. To analyze the procedure adopted by slaughterhouse signatories to both MPF-TAC and Greenpeace-G4, I analyzed the "2016 Annual Sustainability Report" and the 2017 audit report. To analyze the procedure adopted by the slaughterhouses signatory to Greenpeace-G4 only, I studied the 2018 audit report. The documents analyzed show that the slaughterhouses signing to Greenpeace-G4 were concerned about not buying cattle from cattle ranchers who are on the dirty list.

7. The implementation of the MPF-TAC and Greenpeace-G4 cattle agreements: differences and similarities in theory and practice

There are similarities between the two supply chain initiatives. Both agreements require meatpackers to check their dirty lists. Although on paper the MPF-TAC also requires that criminal lawsuits should be checked, federal prosecutors do not enforce compliance with this

condition and the analyzed meatpacker does not check for lawsuits before trading with cattle ranches.

Having the two requirements, dirty list and criminal or civil lawsuits, together could serve as a more powerful way to combat modern slave labor. The dirty lists have problems in their application, such as suspension of publication due to the granting of injunctions by the Supreme Court of Brazil and when some farmers obtain injunctions in the local court to obtain a judicial decision not to have their name on the dirty list. The slaughterhouses could use the criminal or civil lawsuits to fill the gap of not publishing the names and verify if they are buying cattle from cattle ranches accused of modern slave labor practices. Although there is no semi-annual list of criminal lawsuits published as there is with the dirty list, slaughterhouses can request statements from Federal and/or State Courts about whether ranchers have criminal lawsuits. Thus, the lawsuits that the government brings against cattle ranchers could also form an important link between public and supply chain initiatives, that could overcome problems faced by the dirty list.

The Strengths and Weaknesses of Public and Supply Chain Initiatives

Public Initiatives.

Dirty Lists: A strength of the dirty list is its public accessibility. Publishing a single list of cattle ranchers who used modern slave labor was an important advance in the fight against the problem in Brazil. In itself, the dirty list already imposes financial consequences on cattle ranchers when it prohibits those on the list from acquiring credit from banks. The dirty list can also be used to name and shame the perpetrators. The damaged image of the cattle rancher can lead to the loss of business partners, who do not want to be associated with those who use modern slave labor. These two consequences are only possible because the dirty lists are public.

One weakness of the dirty lists is that they are vulnerable to interference and do not adequately cover the full range of labor problems. It is nearly impossible to inspect every cattle ranch in Brazil, which has ~5 million cattle ranches, and the lists rely on a reporting-based method-- investigations are only initiated where there are credible reports that a violation has occurred (IBGE 2017; Rivero de Araujo and Maduro 2010; Théry et al. 2012). Also, the current administration's efforts to cut funding and political support for the labor agency dismantling of the labor agencies and the scarcity of money prevent the labor agents from going into the field and checking whether the complaints made against farmers are true. In 2019, R\$2.3 million (nearly US\$ 460,000) were allocated to cover all expenses that involve the inspections. In 2020, the budget dropped to R\$1.3 million (nearly US\$258,000) (Folha de São Paulo 2011; SAFITEBA 2020). These factors can result in a decrease in the completeness and accuracy of the dirty list. There are also many pressures against dirty lists, when ranchers use judicial and extra-judicial means to try to avoid being listed.

The dirty list – created in 2004-, like other measures restricting the impunity of employers, has been contested. Between December 2014 and March 2017, the publication of the dirty list was suspended by the Federal Supreme Court (STF). In 2014 the Brazilian Supreme Court granted an injunction to the Brazilian Association of Real Estate Developers (ABRAINC) and suspended publication of the dirty lists on the grounds that it was created by decree and not by law (Olinski et al. 2018). Prior to that decision, some individual employers had obtained injunctions to have their names removed from the list. In 2016, however, the Supreme Court overruled the injunction, and the MTE began to publish the list once again as from March 2017. Also, in January 2018, another lawsuit was filed before the STF to declare the dirty list unconstitutional. But the court ruled that the dirty list is a right that all citizens have concerning

the publication of information of public interest. Therefore, the pressure from some sectors of society against the publication of the dirty list has adverse impacts on the fight against modern slave labor in Brazil.

Criminal judgements. The crime of modern slave labor has a severe penalty – penalty can be 2 to 8 years in jail - at least on paper. However, my study does not provide information about how many ranchers went to prison in practice. Such an analysis would require looking at the first judicial sentences and their respective appeals; and my analyses focused on the first judicial sentences only. Even though my analyses were restricted to these sentences, the criminal judgments analyzed were consistent in arguing that someone can only be punished in the criminal sphere if there is gravity in the violations of fundamental rights, such as dignity and freedom, of the offended. Judges exercise a great deal of care in analyzing the seriousness of the offenses because the prison sentence is very heavy, and because it removes the freedom of the individual. Judges feel that there has to be no doubt that the violation of rights has occurred and that, when it occurred, it violated the dignity of the worker beyond a reasonable doubt. Yet, the legal consciousness that different judges bring to cases influences the outcome. The interpretation of what conduct would be considered to violate the law differs for each judge. For example, some judges believe that even if workers labor in poor conditions, such as without drinking water, this is only a reflection of a custom of the workers themselves who do not have such assets in their homes anyway. As such, the judge assumes that the cattle rancher need not provide conditions that are better than the poverty the worker would experience where he or she lives. On the other hand, other judges believe that access to drinking water is a right of all citizens. For them, the reference treatment to be adopted by the cattle rancher is society as a whole and not the reality of the rural worker. Thus, legal consciousness applied to the crime of

reduction to the condition analogous to slavery makes the outcome of the judicial decision uncertain.

Supply Chain Initiatives.

A strength of the cattle agreements is the fact that they can bring market pressure. Meatpacking companies and the retailers who buy from them are increasingly concerned about links to modern slave labor after very public media campaigns highlighting the possible existence of modern slave laborers' hands in meat consumed internationally. To show that they are taking action to avoid especially having environmental and sideways social problems associated with the meat they sell, the beef industry has signed the Cattle Agreements. So, while the companies are part of the problem, the pressure of the market is driving corporations like the slaughterhouses to address mechanisms to solve the problems they have also caused.

However, the supply chain agreements are highly dependent on the dirty lists. The limitations related to the dirty lists show that there may be many more users of modern slave labor in the cattle supply chain than are included in the lists. Because it is difficult to inspect all cattle ranches, there may be cases of modern slave labor occurring in cattle ranchers supplying slaughterhouses who are signatories to the cattle agreements. This is why supply chain initiatives should not rely only on dirty lists as means for combating modern slave labor. A lot of cattle produced using modern slave labor maybe being traded on the grounds that they do not come from dirty listed cattle ranchers.

Federal Prosecutors cattle agreements (MPF-TAC). A strength of these agreements is that they present a broader coverage and enforcement power. Federal Prosecutors managed to propose agreements with more than 110 slaughterhouses in the Legal Amazon, which involves municipal, estate and federal slaughterhouses (Barreto et al. 2017). In the state of Pará, a total of

18 slaughterhouses signed the MPF TAC, 4 from this group also the G4. This MPF TAC slaughterhouses represented 43% of the total active slaughterhouse in the state (n=42) that processed more than 10,000 heads in 2018. Together these MPF TAC plants slaughter 59% of the total cattle slaughtered in Pará in that year (3 million cattle heads) (based on number produced by the GLUE team, 2018). Considering that each slaughterhouse has numerous direct and indirect suppliers, the number of cattle ranchers reached by the measures described in the Federal Prosecutors cattle agreements is potentially enormous. Also, failure to comply with the terms of the cattle agreement may result in federal prosecutors using their enforcement power and prosecuting those who violate the agreement. But MPF-TAC has limited monitoring capacity and rarely takes action. Federal Prosecutors use independent auditors to verify compliance with cattle agreements and only check compliance with the dirty lists.

Audits, however, are limited to a small sample of cattle ranchers. As described in the limitations of supply chain initiatives, the dirty lists may represent only a small proportion of cattle ranchers who actually use modern slave labor. By using only samples, there is the possibility that compliance analysis of slaughterhouses do not capture all instances of cattle ranchers that are on the dirty lists. Thus, by monitoring only a small sample of cattle ranchers, there may be a false conclusion that there was a high degree of compliance with the agreement not to trade with dirty-listed cattle ranchers.

Greenpeace cattle agreements (Greenpeace – G4). A strong feature of the Greenpeace-G4 agreement is that it targets the most important large slaughterhouses. Minerva Foods, BRF, Marfrig and JBS are the main beef companies in Brazil, which export and market beef nationally. The small number of slaughterhouses companies amplifies the focus on these high-profile companies and pressures their compliance with the terms of the cattle agreements. By

2018, five slaughterhouses signed the G4 agreement in Pará (12% of the total 42 plants active in that year that processed more than 10,000 heads in 2018). The cattle slaughtered by the G4 slaughterhouses processed 26% (0.80 million cattle heads) of the total cattle slaughtered in the Pará in 2018 (based on number produced by the GLUE team, 2018). The naming and shaming leverage that Greenpeace has over the G4 therefore has the potential to help enforce the agreement, even if it lacks other types of enforcement power. However, Greenpeace-G4 involves fewer firms and has no enforcement power beyond this reputational pressure. There is no formal punishment for non-compliance. When they realize that there is not much oversight of their activities, suppliers may disregard the provisions and decide for themselves whether or not they will comply with workers' rights. The decision is made not on the basis of the agreements, but on their own personal awareness (Gold, Trautrim and Trodd 2015). Also, since Greenpeace-G4 is voluntary, it is simpler for one of the parties to withdraw from the agreement when there is no support from some actors-such as the Brazilian government-as occurred with Greenpeace in 2017.

Social positions of the actors and the disparities of each initiative

The social position of each actor guides how the fight against modern slave labor is conducted in each public and supply chain initiative. In public policies - dirty lists and Article 149 of the Penal Code, there is a difference between labor inspection agents and federal judges. The labor inspection agents have an essential charge to protect the worker and apply, strictly, the general labor norms described in the Labor Code and the specific norms for the protection of rural workers. There is no margin of discretion, therefore, in the application of the protective norms. Federal judges, on the other hand, have a margin of freedom to decide whether someone has committed a crime under article 149 of the Penal Code. In the case of criminal procedure, the

objective is not the protection of the worker, but to avoid a situation where the defendant is penalized with 2 to 8 years in prison or a fine without being certain that the crime has been committed. This difference is demonstrated in numbers, where 60% of the 40 investigated cases studied were dirty listed by the Ministry of Labor and ~48% were convicted in Criminal Court. Therefore, the difference in the roles of actors in the administrative and criminal branches may explain the difference in the reasoning and the outcome of public proceedings.

In supply chain initiatives there is also a difference between MPF and Greenpeace. The federal prosecutors (MPF) have the official function, provided by the Brazilian Federal Constitution (article 127), of defending the legal order, the democratic regime and the represented social and individual interests. The MPF may propose signing a Conduct Adjustment Agreement (TAC) with the violator of certain rights, with the purpose, among others, of preventing the continuation of the illegal situation. The TAC is binding, meaning that those who fail to comply with the agreement may be prosecuted. Therefore, since the MPF is part of the TAC, the slaughterhouses that signed the MPF-TAC must comply with the agreement. The NGO Greenpeace does not have the same strength as the MPF. The cattle agreements signed by Greenpeace are voluntary and have no enforcement power. In this case, the G4 enforces worker protection through voluntary adherence, or as a means to preserve corporate reputations. Therefore, the position of the actors in the signing of the MPF-TAC and Greenpeace-G4 has great influence on the enforcement of each cattle agreement.

8. Discussion

The conclusion of the study needs to be cautious, given the amount of inspection reports accessed. Of the 150 ranchers investigated for modern slave labor, which would represent 150 inspection reports, I had access to 40 inspection reports. Having only 40 reports analyzed may

impact the result on which violations are most commonly practiced by dirty listed cattle ranchers.

Even in the face of caution about the conclusion of the study, my research is innovative in extending understanding about the intersections of public and supply chain initiatives by being attentive to how local norms interact with the distinct structures, cultures, and norms of relevant global actors (Gold, Trautrim and Trodd 2015; Scherer and Palazzo 2011; Schrempf-Stirling and Palazzo 2016). The main conclusion is that the failures of the dirty list can diminish the effectiveness of the supply chain initiatives.

There was an important advance by Federal Prosecutors and Greenpeace to get slaughterhouses to commit to more mechanisms to combat modern slave labor. However, when the dirty list does not accurately reproduce all the cattle ranchers using modern slave labor, there may be a possibility that the cattle sold are contaminated with this social problem, but the slaughterhouses have no way of knowing. Thus, even if Greenpeace-G4 and MPF-TAC make efforts by auditing cattle purchases, there is no guarantee that the meat being sold is free of modern slave labor.

Second, the reduction of the MPF-TAC's requirements for monitoring only the dirty list, not the criminal lawsuits, indicates a loosening of the fight against modern slave labor. The function of the Federal Prosecutors is to monitor the application of the law and also to act in a preventive manner to avoid damage to the public interest. The provisions of the TAC are mandatory to be implemented by its signatories and when they are not complied with, the Federal Prosecutors may take legal measures against the non-compliant party. When the Federal Prosecutors do not enforce the requirement of no cattle trading by those with criminal lawsuits, there is a weakening of official instruments to combat modern slave labor.

Third, within the public initiatives, my study also indicates that failures on the administrative procedure - especially regarding the low number of cattle ranchers investigated-, can impact on the criminal procedure. The investigation reports are important starting points for understanding the problem in the field and can serve as important evidence to criminalize the cattle rancher before the Criminal Court. However, as there is a reduced number of investigations, there is also a decrease in the number of criminal lawsuits filed by the Federal Prosecutors. Within the criminal procedure, my study indicates that there are different interpretations on what would be considered the crime of reduction to a condition analogous to slavery. Given that almost half of the cases analyzed were acquitted, if Federal Prosecutors file a low number of criminal charges against cattle ranchers there is an inference that very few cattle ranchers may go to jail.

These examples about procedural weaknesses and how they negatively impact public and supply chain initiatives indicate that there is a need for greater complementarity and coordination between initiatives. All initiatives are important to combat modern slave labor in a context where there is no technology to monitor cattle ranches. However, public and private institutions need to improve their own internal procedures to have more influence. There is great flexibility in the actions of the social actors involved in each procedure, allowing this discretion can weaken the fight against modern slave labor in practice.

9. Conclusion

Overall, the current public and supply chain initiatives to combat modern slave labor complement each other. However, each initiative presents weaknesses that can diminish the application of another initiative (e.g., suspension of the publication of the dirty list makes it difficult to enforce cattle supply chain agreements). In addition, when the initiatives are analyzed

individually it is noticeable that some are stricter than others. On the public initiatives, the Ministry of Labor's procedure that generates the dirty lists seems to be stricter with cattle ranchers and the procedure of the criminal courts that judge the crime of reduction to a condition analogous to slavery has great margin of interpretation on the practice of modern slave labor. In the realm of supply chain initiatives, Greenpeace-G4 strives to implement the requirement not to trade cattle with dirty listed cattle ranchers. The MPF-TAC, on the other hand, reduces the implementation of the requirements solely to looking at the dirty list, and does not monitor the implementation of trading cattle with cattle ranchers with criminal lawsuits. If there were not so many weaknesses and if there were not the oscillation of rigor in each initiative, the complementarity of public and supply chain initiatives would be more tightened. Thus, the fight against modern slave labor could be intensified and the rural workers on cattle ranches, better protected.

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Appendix for Chapter 1

Table 1. Total of Cattle Ranchers practicing each kind of violations

Category of offense to just labor standards	
Hire or keep employees without the respective record in a book, file or competent electronicsystem	36
Do not write down the employee's CTPS within 48 hours from the start of work	27
Hire an employee who does not have CTPS (WORK PERMIT)	16
Do not make, by the 5th working day of the month following the due date, the full payment of the monthly salary due to the employee	14
Pay the employee's salary, without the receipt.	7
Do not notify the MTE, by the 7th day of the following month or within the deadline defined in the regulation, the CAGED	7
Do not deposit the FGTS percentage monthly.	6
Do not submit the RAIS within the legally established deadline	3
Do not submit documents subject to labor inspection on the day and time previously set by the inspector.	3
Do not provide the Auditor with the clarifications necessary to perform his duties.	3
Do not consign in mechanical register, manual or electronic system, time of entry, exit and rest period effectively practiced by (...)	2
Do not grant vacations for the 12 months following the purchase period.	1
Do not make notes relating to the employment contract on the employee's work card.	1
Paying less than the current minimum wage	1
Do not pay the installments due upon termination of the employment contract until the 10th(tenth) day, according to the legal terms.	1
Do not pay the employee the remuneration corresponding to the weekly rest	1
Block the free access of the labor inspector to all the premises of the establishments subject to the labor legislation regime	1
Keep with documents subject to off-site labor inspection	1
Do not deposit in the employee's account, at the time of termination of the employment contract, the deposits of the month of termination and the immediately preceding one, which has not yet been collected, and the compensatory indemnity of the FGTS levied on	1

Do not pay, or to pay after due date without the legal increments, the social contribution levied on the amount of all deposits due to the FGTS, corrected and remunerated in accordance with the law, relating to the employee's employment contract	
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Table 2. Total of Cattle Ranchers practicing each kind of violations

Category of offense against the dignity and freedom of the worker	Number of workers
Do not provide personal protective equipment	27
Do not ensure the performance of medical examinations for hiring of workers	27
Do not provide sanitary facilities to workers.	27
Do not equip the rural establishment with material necessary to provide first aid.	22
Do not provide housing of individual lockers for the storage of personal objects	16
Do not provide places for workers to eat.	16
Do not provide enough fresh drinking water in the workplace.	15
Do not provide a suitable place for food preparation for workers.	9
Do not provide training on prevention of accidents with pesticides to all workers exposed directly.	8
Do not provide all chainsaw operators with training in the safe use of the machine or to provide training with a workload of less than eight hours.	7
Provide drinking water under conditions that are not hygienic or allow the use of collective glasses for drinking water consumption.	7
Do not provide housing for workers	6
Do not provide coverage that protects maintain areas of living against the weather.	6
Do not make available, free of charge, tools appropriate to the work and physical characteristics of the worker, replacing them whenever necessary.	5
Do not keep living areas that with masonry walls, wood or equivalent material.	5
Do not provide beds in the accommodation or provide beds in disagreement with the provisions of NR- 31.	5
Do not provide the buildings for the storage of pesticides, adjuvants and related products with signs or posters with danger symbols.	4

Category of offense against the dignity and freedom of the worker	Number of workers
Do not provide storage for pesticides, adjuvants and related products more than thirty meters from homes and water sources;	4
Do not provide the accommodation with doors and windows capable of providing good sealing conditions safely	4
Do not provide cemented flooring, of wood or equivalent material in living areas	4
Do not provide medical examination to workers	3
Do not provide training for machine and equipment operators.	3
Do not provide accommodations that are not separated by gender	3
Do not allow the worker's access to health agencies, for purposes of applying tetanus vaccination	2
Do not assess risks to workers' health and safety	2
Do not grant the employee weekly rest of 24 consecutive hours	2
Do not keep electrical installations without risk of electric shock or other types of accidents.	2
Do not provide right hand protection when workers use chainsaw	2
Do not adopt the necessary procedures, when accidents and occupational diseases occur	2
Do not protect power transmissions when workers use machine equipment.	2
Do not make available, on the work fronts, fixed or mobile toilet facilities composed of toilets and washstands, in the proportion of a set for each group of forty workers	2
Do not provide laundry facilities for workers	2
Do not maintain living areas with adequate conditions of conservation, cleanliness, and hygiene.	2

Category of offense against the dignity and freedom of the worker	Number of workers
Do not keep storage of pesticides, adjuvants and related products more than thirty meters from homes and places where food, medicines or other materials are kept or consumed, and from water sources;	2
Do not provide tables with smooth and washable tops in the place for meals;	2
Do not to provide the establishment with a place or container for storing or keeping meals	2
Do not provide shelters on work fronts to protect workers from the weather during meals	2
Making discounts in the employee's wages, except those resulting from advances, from provisions of law, convention or collective labor agreement	2
Do not require workers to use personal protective equipment.	1
Allowing the worker to assume his/her activities before being submitted to clinical evaluation integrating the ASO.	1
Allowing machine, equipment or implement to be operated by untrained or unqualified worker	1
Do not inform workers of the risks arising from work, to ensure their physical integrity	1
Do not provide sufficient instructions to workers who handle pesticides, adjuvants or related products and/or to workers who develop activities in areas where there may be direct or indirect exposure to adjuvant pesticides or related products.	1
Do not provide water and/or soap and/or towels for personal hygiene when applying pesticides.	1
Do not provide workers exposed to pesticides with personal protection equipment and/or work clothing that is not in perfect conditions of use and/or properly cleaned.	1
Do not provide manual chainsaw.	1
Do not provide a chain catcher pin to chainsaw.	1
Do not provide a left-hand protector in chainsaws.	1

Category of offense against the dignity and freedom of the worker	Number of workers
Do not provide operator protection structure in case of overturning and/or that do not have a safety belt in machines or motorized mobile equipment	1
Do not provide headlights or lights or sound signals in reverse coupled to the gear shift system, or that do not have horns or rear-view mirror in mobile machinery or motorized equipment	1
Do not provide manual chain brake to chainsaws	1
Allowing use of stoves, stoves or similar inside the accommodation	1
Do not ensure drinking and fresh water supply in excess of 250 ml per hour / man work.	1
Do not provide a permanent process of sanitization of the places where sanitary facilities are located or failure to keep the places where sanitary facilities are located clean and odorless throughout the working day.	1
Do not provide sanitary facilities separated by gender	1
Do not provide clean water and toilet paper in sanitary facilities.	1
Do not provide family housing with adequate sanitary conditions	1
Do not make available on the work fronts sanitary facilities consisting of several toilets and wash-basins	1
Do not ensure working conditions, hygiene, and comfort	1
Do not provide floor made of resistant and washable material to family housing.	1
Allowing living areas that do not have a wood or equivalent flooring	1
Allowing the use of a living area for purposes other than those for which it is intended.	1
Allowing collective housing of families.	1
Keep employees working under conditions contrary to the decisions of the authorities.	1

Category of offense against the dignity and freedom of the worker	Number of workers
Maintain family housing built in a place that is not airy or in a place less than 50 m away from buildings intended for other purposes	1
Allowing the places for preparing meals directly connected with the accommodation	1
Do not provide meal facilities for workers.	1
Use a place for meals that does not have good conditions of hygiene and comfort	1
Do not make the container available for the safekeeping and conservation of meals in hygienic conditions.	1
Limit in any way the employee's freedom to dispose of his or her salary	1

Table 3. Total of Cattle Ranchers practicing each kind of violations

Category of offense against children	
Employ workers under the age of 16 years	6
Make no provisions to allow a 16- or 17-year-old employee to attend school	1

Chapter 2 - Public data on modern slave labor needed by Brazil's cattle sector

Abstract

Modern slave labor continues in the Brazilian Amazon where it is associated with cattle production. To address this problem, activists have added rules to combat modern slave labor to formal agreements already established to control deforestation, such as the zero-deforestation cattle agreements. These rules aim to block the trade of beef contaminated with modern slave labor between slaughterhouses and supplying properties. Here we identified properties with modern slave labor and then used cattle transaction data to track sales of cattle between farms and to slaughterhouses. We found that modern slave labor properties still have remaining forest, indicative of the labor required for pasture expansion. We also found that major slaughterhouses that signed the cattle agreements that include requirements to refuse beef with modern slave labor avoided purchasing cattle from suppliers accused of modern slave labor, especially when the dirty lists were publicly accessible online. However, cattle ranchers listed as modern slave labor users benefit from complex cattle distribution networks to sell their cattle indirectly to modern slave labor -free committed slaughterhouses. We concluded that the dirty list listing modern slave labor users should be maintained on publicly available websites to allow slaughterhouses, retailers, and consumers to send strong market signals discouraging modern slave labor.

Keywords: cattle ranchers, modern slave labor, deforestation

1. Introduction

Extensive deforestation for cattle production in the Amazon has alarmed environmentalists and spurred the adoption of high profile zero-deforestation commitments by many slaughterhouses in the region (Garret et al. 2019, Alix-Garcia and Gibbs 2017). Less recognized, however, are the labor violations associated with forest clearing for pasture, which has been accelerated by increasing global demand for meat (Jackson et al. 2020). In Brazil, labor violations on cattle ranches often involve laborers recruited from impoverished regions (Phillips and Sakamoto 2012). These same trends are found throughout other cattle production regions in Latin America (Bedoya, Bedoya, and Belser 2009).

When workers are unable to leave the property or are otherwise held in conditions that violate labor laws, they become what the literature has called *forced labor* (Belser, 2005), *slave labor* (McGrath, 2013) and *modern slave labor* (Gold, Trautrim and Trodd 2015, Crane 2013, Bales 2016). Some countries adopt the term "forced labor" (Belser 2005) following the United Nations (UN) and some Conventions of the International Labor Organization (ILO) such as the ILO Forced Labor Convention of 1930 (n. 29) and the Abolition of Forced Labor Convention of 1957 (n. 105). Article 2, section 1, of the Forced Labor Convention, 1930 (No. 29) defines forced labor as "all work or service

However, in 2003 Brazil adopted broader worker protection by recognizing that the freedom to be able to leave the workplace and the dignity of the worker should be protected (Phillips and Sakamoto 2011). It was decreed that forced labor means holding the employee in the workplace under physical or psychological threat. Debt bondage refers to keeping the employee in the workplace because of a debt owed to the employer. Long hours of work means that the employee works more than 15 hours a day without rest. Degrading conditions refers to

working in a place without drinking water, sanitary facilities, food, accommodations, etc. If an employer practice any of the four manifestations mentioned (forced labor, debt bondage, long hours of work, and degrading working conditions), the employer can be punished for the crime of reduction to a condition analogous to slavery (Garreto, Baptista and Mota 2021; art. 149 of the Penal Code).

The historical root of the modern slave labor problem in the Brazilian cattle sector has been identified by scholars to be the combination of cheap land, poor laborers, and the pursuit of higher profits by cattle ranchers as main factors to hiring of modern slave laborers in the cattle sector (Phillips and Sakamoto 2012; Emberson et al. 2019; Brown et al. 2019). In the 1970s there were significant federal incentives for influential families and multinational companies to buy large ranches cheaply to start cattle ranching activities (Bales 2012). In the Amazon, especially in southern Pará, the consequence was increased social and land inequality stemming from the implementation of cattle ranches (Théry, Girardi and Hato 2012; Girardi, Mello-Théry, Théry and Hato 2014; McGrath 2013). Upon arriving in Pará, impoverished migrant workers had to work in the pastureland for other ranchers who owned large cattle ranches (Prado 2002). Land concentration and poverty continue to be significant social problems in Pará today. However, the persistence in the use of modern slave labor conditions in cattle ranching now has another factor: the search for higher profits by cattle ranchers. Some cattle ranchers claim that the use of modern slave labor practices is necessary to offset the high taxes, labor and environmental burdens imposed by the Brazilian government (Phillips and Sakamoto 2012). The persistence of modern slave labor in cattle ranching (and other industries) highlights the need to debate ways for meaningful social change in Brazil.

The public sector in Brazil have launched national initiatives to address the problem of cattle ranching-associated modern slave labor and confront wealthy and powerful actors who benefit from its persistence. For example, the Brazilian government has launched the official dirty lists. The dirty list (Decree n. 540/2004) was an important initiative created in 2004 by the public sector in Brazil. It is maintained to this day by the Ministry of Labor to combat modern slave labor and consists of publishing the names of employers who have used modern slave labor. The procedure that culminates with the publication of the list begins with a complaint, usually made by whistleblowers, to the Ministry of Labor. The Ministry of Labor sends labor agents to the reported site to investigate whether there is a violation of the worker's freedom and/or dignity. The labor agents document their findings in a report and the accused employers are given the opportunity to file a rebuttal. The Ministry of Labor assesses the labor agents' report and the employer's defense. Once the Ministry of Labor rules that modern slave labor has taken place, the employer is then added to the dirty list, which is published on the Ministry's website every six months. The employer's name is kept on the list for two years and is removed after this period if there are no further offenses and all fines have been paid. The employer may manage to have their name removed from the dirty list if an injunction is granted in a federal court.

Although the dirty list is an important resource in the fight against modern slave labor in Brazil, it has suffered pressure against its publication and criticism about the depiction of the reality that its data portrays. All of these conditions appear to be worsening (MapBiomass 2018, IBGE 2020) creating an urgent need for increased public attention to this matter. In 2014, the Brazilian Association of Real Estate Developers (ABRAINC) legally challenged the dirty list based on the claim that the lists could not be created by Decree - which are not drafted by

Congress - but only by specific law - this one drafted by Congress (Olinski et al. 2018). Based on this argument, the Supreme Court granted an injunction to ABRAINC and the Ministry of Labor suspend the online publication of the dirty list. The suspension began in December 2014. The Supreme Court overturned the injunction in 2016, and the Ministry of Labor resumed publishing the dirty list in March 2017. In January 2018, a new lawsuit alleging that the dirty list is unconstitutional was filed by ABRAINC before the Supreme Court. The Court, however, ruled that the dirty list fulfills a right that all citizens have regarding the publication of information of public interest. Therefore, even with the pressure from some sectors of society over the years, the dirty lists continue to be published on the Ministry of Labor's website, and even when the Supreme Court suspended the publication of the dirty list in the Ministry of Labor website, any Brazilian citizen could request them through the Access to Information Act (Act No. 527/2011)³.

The dirty lists published to date suggest a concentration of modern slave workers in the cattle ranching activity in the Brazilian Amazon. “Nearly two-thirds of the cases” presented in the dirty list in 2009, are in the Amazon region, and cattle ranching accounts for “four out of five” of these cases. Pará has “one out of every three” workers freed from modern slave labor conditions that were related to cattle ranches (Greenpeace 2009, p, 16). However, compared to the total number of properties, “only a small number of rural Brazilian properties were found using slave labor” (Sakamoto 2009, p. 30). Focusing on the state of Pará, located in the Brazilian Amazon, the small number of cases found is likely related to the fact that Pará has just 67 labor agents - according to the Ordinance No. 750, August 16, 2018-, to investigate approximately 100,000 cattle ranches statewide (IBGE 2019). The scenario of few labor agents to investigate

³ Art. 10 - Any interested party may present a request for access to information to the organs and entities referred to in Art. 1 of this Law, by any legitimate means, and the request must contain the identification of the requester and the specification of the information required.

many cattle ranches leads to the need to establish strategies that prioritize investigations into employers who appear to be restricting worker freedom and dignity. Thus, labor agents focus on complaints made by whistleblowers who suspect that ranchers are using modern slave labor. Greenpeace (2009, p. 16) highlighted that dirty lists may not be comprehensive insofar as to be listed a cattle rancher should exhaust “all further legal avenues for appeal (a lengthy process in Brazil).” Despite limited in scope, the dirty lists provide official and reliable sources of information for understanding patterns of modern slave labor in the cattle sector.

Private sector companies such as meatpacking companies and the retailers that buy from them have emerged as important players in the fight against modern slave labor in cattle ranching in Brazil. Rules about avoiding properties with links to modern slave labor were included in the two major zero-deforestation commitments signed by the beef industry, known as the Zero-Deforestation Cattle Agreements (CAs). One is the Terms of Adjustment of Conduct signed between the Federal Prosecutor’s Office (hereafter MPF-TAC) and nearly 110 slaughterhouses that were found to be associated with deforestation after 2009 (Barreto et al. 2017). The other agreement was made between Greenpeace and the four main meatpackers in Brazil—Minerva Foods, BRF, Marfrig and JBS – collectively known as G4 (hereafter G4). Among their provisions are to avoid properties with deforestation, lacking property registration, located in a protected area, or are on the government’s dirty list for modern slave labor (Gibbs et al. 2016, Pinheiro, Emberson and Trautrim 2019). Others have highlighted the potential for supply chain initiatives, such as the CAs, to help reduce modern slave labor practices (Crane 2013; Emberson, Pinheiro and Trautrim 2019).

In this study, we seek to understand cattle ranching-associated modern slave labor at the property level, focusing on the state of Pará, where more than 30% of cattle ranching-related

modern slave labor cases in the Amazon occurred over a time period. We conducted archival research to track down the dirty lists, Labor Inspection reports, and lawsuits filed by the Federal Public Prosecutor's Office. We used these documents to identify what types of modern slave labor cattle ranchers practiced (forced labor, debt bondage, long hours of work and degrading working conditions). To identify the cattle ranches with modern slave labor, we combined eleven published dirty lists with Rural Environmental Registry (CAR). Crossing the dirty lists and property boundaries allows us to study deforestation rates and remaining forests area. We draw on Gibbs et al. 2020 to combine the dirty lists, property boundaries cadasters, and Animal Transit Forms (GTAs), which are publicly available cattle transit data. Cross-referencing these three datasets allows us to identify the role of modern slave labor properties in the cattle supply chain such as whether they are direct suppliers who sell to slaughterhouses or indirect suppliers who sell to other suppliers and also to track the flow of modern slave labor -contaminated cattle to different types of slaughterhouses (federal, state or municipal), including those with zero deforestation commitments.

2. Methods

Study Area

Due in part to its vastness, the Legal Amazon is the region with the most cases of modern slave labor linked to cattle production, with “one out of three people” of these cases taking place in the state of Pará (Greenpeace 2009, p. 16) (Figure 1). Spurred by federal programs, Pará greatly expanded agriculture in the 1970s, cattle ranching in particular. By the end of the 1980s, Pará had lost 23% of its forested area (38.8 million Ha) to pasture. This settlement process is still ongoing, leading to significant land use impacts; more than 39% of the Brazilian Amazon's

deforestation in the last decade occurred in Pará where 23% of the Amazon's cattle are produced on more than 100,000 cattle ranches (INPE/PRODES 2021; IBGE 2019). These labor-intensive activities have attracted nearly 115,000 citizens to work on these cattle ranches (IBGE 2019). In 2017, 193 workers were rescued in a modern slave labor condition with 83% being residents of Pará state itself (Observatório Digital do Trabalho Escravo no Brasil 2017).

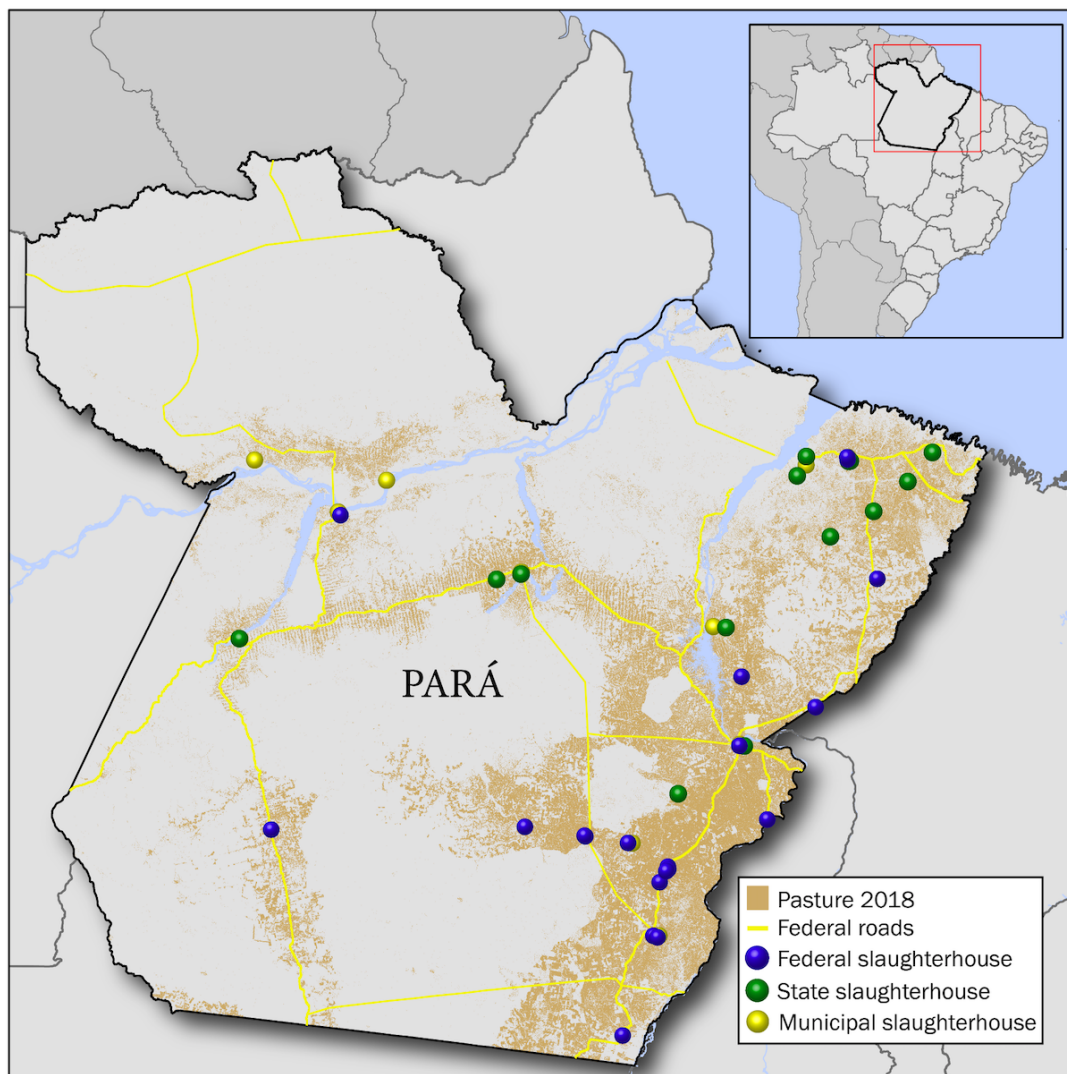


Figure 1. Map of Pará showing pasture by and slaughterhouse by 2018.

Input data

To run our analyses, we used five main datasets to identify characteristics of properties that used modern slave labor:

1.) The Ministry of Labor's "dirty lists" which are published every 6 months and publicly discloses the names, identification numbers, addresses and types of agro-pastoral activities of those convicted of modern slave labor. We used eleven dirty lists (i.e., 2003 to 2016). We were able to access the data through the work of institutions such as Repórter Brasil, and blogs (Reporter Brasil and Sakamoto 2016; Business and Human Rights Resource Centre 2013; Ferreira 2013; Ecodebate 2014). These institutions accessed the lists via the Access to Information Act while its publication was suspended between 2014-2017 or directly via the Ministry of Labor's website when outside of the suspension period and then released the lists to the general public on their respective websites. There should have been 15 additional dirty lists published during our study period (2 per year each year from 2003-2013 equals 26, minus the 11 lists that we were able to access that cover 2003 and 2016).

2.) Reports from the Regional Labor Office (2006 - 2014) that describe the owner of the property, the kind of production (e.g., cattle) performed by cattle ranchers, the labor functions executed by the workers, and the labor norms violated by the cattle ranchers. We used the Access to Information Act to have access to 31 labor inspection reports from Pará.

3.) Judicial decisions (2011 – 2020) from Pará Federal Court that tried cattle ranchers on the crime of "reducing someone to a condition analogous to slavery" accessed by trf1.jus.br. The decisions also provide information on the types of modern slave labor on whether the ranchers performed degrading working conditions, debt bondage, long hours of work, or forced labor. We read 62 judicial decisions to classify which types of modern slave labor practiced on the field.

4.) Publicly available, federally managed cadasters that provide property boundaries, owner names and ID numbers (L’Roe et al. 2016; Sistema Nacional de Cadastro Ambiental Rural, SiCAR 2016; CAR 2016; INCRA 2015; Terra Legal 2015).

5.) The Animal Transit Guide (GTA) data, which is used to track animal health and vaccination data and identifies cattle movements between properties and slaughterhouses (ADEPARÁ 2019).

The analytical levels and variables studied

Our study was conducted at three levels:

Level one (modern slave labor only): we identified which state modern slave labor most occurred and classified the types of modern slave labor violations (forced labor, debt bondage, long hours of work and degrading working conditions), using reports from the Regional Labor Office and judicial decisions.

Level two (modern slave labor and property boundaries): we used the intersection of dirty lists and property boundaries to identify the location of properties whose owners were on the dirty list. We also analyzed deforestation rates, remaining forest, pasture area, whether the properties were in protected areas or on the embargo list for illegal deforestation.

Level three (Combination of modern slave labor, property boundaries and GTA all together): we cross-referenced the dirty list with properties boundaries and the GTAs (2013-2018) all together to identify the position of the properties in the cattle supply chain. We identified properties on the dirty list and then tracked their role in the cattle supply chain (direct vs indirect supplier) and identified which slaughterhouses and other properties purchased cattle connected to these properties. We also considered if purchases were made when the dirty list was suspended (2014 to 2017) or published (2013 and 2018). We also analyzed properties that had

criminal lawsuits filed by the Federal Public Prosecutor's Office after 2009— the year the MPF-TAC was signed and when the slaughterhouses' prohibition to trade cattle with properties that had criminal lawsuits began.

3. Results

From the level one (modern slave labor only)

Pará is the Brazilian leader in cases of cattle ranching-related modern slave labor.

Based on our analysis of the eleven available dirty lists for the period between 2003 - 2016, we identified the names of 997 employers engaged in using modern slave labor practices. Of these, 334 were associated with cattle ranching and located in the Legal Amazon. Pará accounts for 255 of these employer names with modern slave labor linked to cattle ranching in the Legal Amazon (see Figure 2).

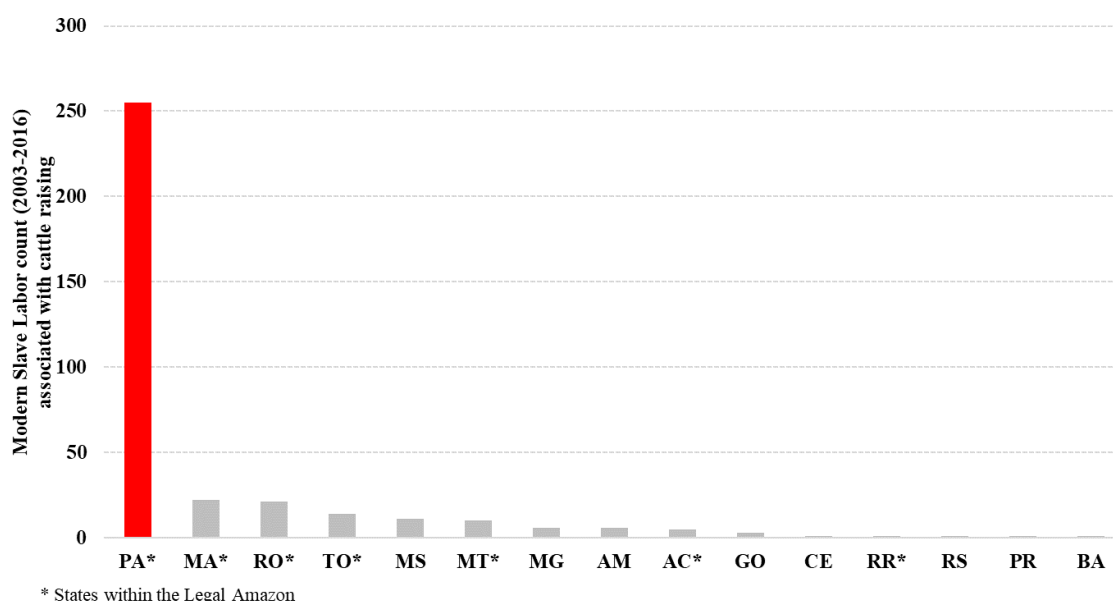


Figure 2. Pará accounts for the majority of cases of modern slave labor associated with cattle ranching.

Degrading working conditions and debt bondage combined are the most prevalent types of modern slave labor faced by workers

From the 255 employer names with modern slave labor linked to cattle ranching in the Legal Amazon, we used 93 names to classify the types of modern slave labor (debt bondage, long hours of work, degrading working conditions, and forced labor). 38% of employers practiced jointly degrading working conditions and debt bondage, which means they do not provide good working conditions (e.g., drinking water, housing, food, toilets), and also restricted workers' freedom preventing them from leaving the cattle ranch by using debt (e.g., withholding wages). However, 31% of the employers analyzed experienced degrading working conditions only. The other combinations between the types of modern slave labor add up to 29%.

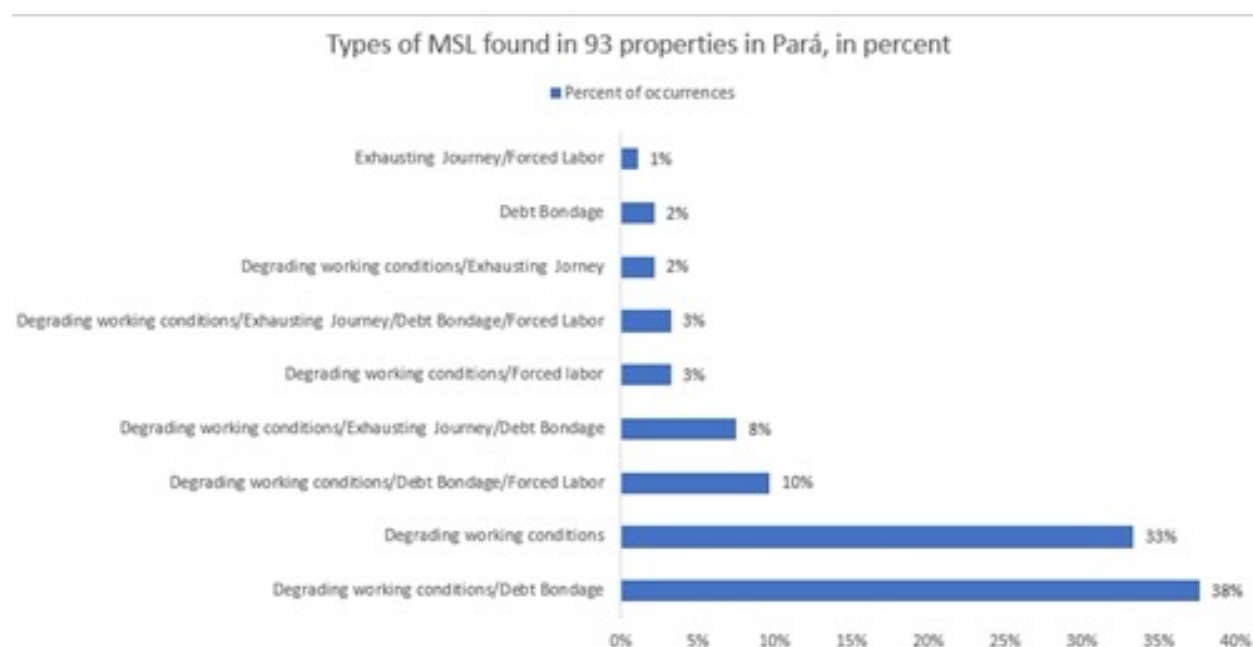


Figure 3. Main types of MSL found within the 93 properties of our sample in Pará.

From the level two (modern slave labor and property boundary dataset)

More than half of properties on the dirty list also had illegal deforestation

Of the 255 cattle ranchers listed in the dirty list located in Pará, we found 131 properties that matched with registries that provide property boundaries (Table 1). These properties averaged 2,839 ha, which differs to the average of 265 ha for all properties with pasture of Pará. On average, pasture covered 52% (2,840 de 1,473Ha) of their property, compared to 66% for all cattle properties. These properties had higher than average deforestation rates: across all pasture properties in the state, only 35% deforested between 2010-2018. However, 55% of the dirty listed properties cleared forest, with almost all (93%) of the clearing going beyond the legal limit of the Brazilian Forest Code. On average, these properties had 36% of their forest area remaining (1,044 ha). We also identified thirteen properties on the embargo list for illegal deforestation (10%, n=131) and thirteen located within protected areas (10%, n=131).

From the level three (Combination of modern slave labor, property boundary dataset and GTA all together)

Slaughterhouses avoided modern slave labor properties when the dirty lists were available

After we cross-referenced modern slave labor and property boundary dataset and found 131 properties, we cross-referenced GTA data to find out if these properties were direct or indirect suppliers. After we cross-checked GTA on the 131 properties, we found 38 direct supplier properties selling cattle to 19 slaughterhouses (18 CAs e 1 non-CA) (Table 2). All 38 properties sold cattle to the 18 slaughterhouses CAs in the sample; and 33 properties sold to the single non-CA slaughterhouse (Table 2). CAs slaughterhouses were much more likely to buy

from dirty listed properties during the suspension period when the data was not available.

Between 2013 to 2018, there were 10,567 transactions - 83% occurred during the suspension period (December 2014 – March 2017). However, two properties that are direct suppliers of federally inspected slaughterhouses potentially sold cattle outside the suspension period.

Table 2. Number of selling transactions and potential properties sellers by period and CAs and Non-CAs Slaughterhouses buyers.

	CAs slaughterhouses (N=18)				Non-CAs slaughterhouses (N=1)				Total	
	N. of potential properties sellers	% Total	N. of selling transactions	% Total	N. of potential properties sellers	% Total	N. of selling transactions	% Total	N. of selling transactions	% Total
Dirty list suspension period (December 2014 - March 2017) Publication period (Period outside December 2014 - March 2017)	31	82 %	7,329	86 %	22	67 %	1,391	69 %	8,720	83 %
	7	18 %	1,214	14 %	11	33 %	633	31 %	1,847	17 %
Total period (2013-2018)	38	100 %	8,543	100 %	33	100 %	2,024	100 %	10,567	100 %

MPF-TAC slaughterhouses buy cattle from properties even after criminal lawsuits have been filed

We found 13 properties with criminal lawsuits that sold directly to MPF-TAC slaughterhouses and 3 to non-MPF-TAC slaughterhouses. Sales continued after the lawsuits were filed in almost all cases. On average, the lawsuits were filed 4 years before the date of the GTA transaction. Therefore, our results suggest there were slaughterhouses do not monitor for criminal lawsuits despite the requirement in the MPF-TAC contracts. (See Table 3).

Table 3. Direct suppliers that had criminal lawsuits and their transactions with MPF-TAC and non-MPF-TAC

	MPF-TAC		Non- MPF-TAC	
	N. of potential properties sellers	N. of selling transactions	N. of potential properties sellers	N. of selling transactions
Total period (2013 - 2018)	13	157	3	14
Cases of direct suppliers who traded cattle after the criminal lawsuits were filed	10	116	2	13

Indirect suppliers taint more direct suppliers who sell to CAs slaughterhouses

After we crossed modern slave labor, property boundary dataset and GTA, we found 131 properties. Out of the 131 properties, we found 41 properties being indirect suppliers whose cattle may have reached federal slaughterhouses. These 41 indirect supplier properties sold to 371 direct supplier properties. We estimate that for every indirect supplier property with modern slave labor, 9 direct supplier properties were potentially contaminated. Looking further down the supply chain, we observed that direct supplier properties that purchased from indirect supplier properties with modern slave labor sold cattle to slaughterhouses subscribing and not subscribing to the CAs. 90% (out of 371) of direct suppliers that purchased from indirect with modern slave labor sold cattle to CAs and 30% (out of 371) also sold to non-CAs.

4. Discussion and conclusion

The conclusion of the study needs to be cautious, given the apparent dramatic underreporting of modern slave labor in the study region. It is urgent to have more labor agents to inspect 100,000 cattle ranchers in Pará. Having only 67 labor agents to inspect the large number of cattle ranchers may impact the representativeness of the number of cattle ranchers using modern slave labor in the state. We should also be cautious with the discovery that some suppliers listed on the dirty list still supply slaughterhouses that sign the CAs. It cannot be inferred that when the cattle were traded there was a violation of the terms of the CAs. The analysis of whether or not the CAs were violated must be done on a case-by-case basis and according to each wording of the CAs.

Even facing the limitations, our method is pioneering as it allows us to understand a little more about the "complex set of variables and relationships that explain why slavery persists at the enterprise level" (Crane 2013, p. 66) and it at the property level. Our main conclusion is that transparency of data on modern slave labor impacts on the decrease of cattle trading when the publication of the dirty list occurs, especially among slaughterhouses that are signatories to CAs. We note that in the case of criminal lawsuits, there is no publication of a public list of criminal lawsuits as there is with the dirty lists. The lack of publication may have impacted on the high number of cattle transactions that take place between direct suppliers and slaughterhouses that are CAs signatories and non-signatories. If slaughterhouses want to know whether their direct suppliers have a criminal lawsuit, they must request this information from their local federal courts. Such a procedure may be impractical, considering the daily dynamic nature of the buying and selling of cattle by slaughterhouses and their direct suppliers.

Another conclusion is that the existence of still forested area brings a concern about the exploitation of modern slave labor. Studies point out that after deforestation, there is a need to hire workers to clean and prepare the pasture to receive the cattle (Burberi 2007, Jackson et al. 2020). If there are areas of forest with potential for deforestation, the presumption is that ranchers will use rural workers. However, if cattle ranchers do not offer freedom and dignity to the worker, new cases of modern slave labor may be observed in the future among all suppliers. Thus, properties with deforestation rates that have remaining forests and pasture areas should have more attention from public and supply chain policies regarding the fight against modern slave labor.

Furthermore, we indicate that the type of modern slave labor most practiced by cattle ranchers is the violation of decent (or humane) working conditions. Studies indicate that debt bondage is the most common form of modern slave labor in Brazil (Francelino-Gonçalves-Dias and Mendonça 2011). However, what our study points out is that for cattle production, the 'dirty' cattle ranchers studied practice the failure to provide humane conditions as the most common form of modern slave labor. Human or basic working conditions are understood to be the provision of drinking water, accommodation, bathrooms, food, among others. Our study also points out that debt bondage is one of the modalities practiced, but it is generally associated with practices of violation of inhumane working conditions.

Limitations

Our study has the following limitations. First, we did not do fieldwork interviews with the former modern slave workers and slaughterhouses. In addition, only a smattering of samples was found. However, we still hold that our findings are of value. Although numerous studies have shown the social-economic characteristic of the workers as possible causes of modern slave

labor in Brazil, few have considered the characteristics of the properties where the labor takes place. Thus, even though these findings face limitations, we concede the need to increase the size once more perpetrators are caught, which will allow us to improve the matching of GTAs-property boundaries dataset.

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Chapter 3 - Modern slave labor: analysis of the requirements of financial institutions for granting credit in Brazil

Abstract

Cattle ranching is the major driver of modern slave labor in the Brazilian Amazon. Several public and supply chain initiatives have been implemented in the region to prevent the advance of modern slave labor in cattle ranches. These initiatives are developed by NGOs, the Brazilian state, and companies, which present many limitations in the fight against modern slave labor. So, there is a need to discuss new actors, such as banks, to improve this fight. In this research, I used exploratory and descriptive analyses to identify any modern slave labor-related conditions required by Brazilian banks in their loans to cattle ranches. Specifically, I investigate whether the banks that follow Basel III recommendations and/or the Equator Principles, United Nations Principles for Responsible Investment, and the National Compact to Combat Modern Slavery ask for more requirements coming from national standards than those banks that do not follow any convention. I found that national standards point to both mandatory and optional requirements. However, the bank that does not follow the Basel III recommendations only complies with the requirements set out in the national standards; and the banks that follow these recommendations are signatories to the Equator Principles and the United Nations Principles for Responsible Investment, indicating that they may have specific requirements for cattle ranching. When considering only the national standards, I found that the requirements are the same for banks that the Basel III recommendations and those that do not. I concluded that national institutions, such as the Central Bank of Brazil, can establish national standards with additional requirements for banks that do not follow the Basel III recommendations.

Keywords: socioenvironmental risk, banks, cattle

1. Introduction

In Brazil, environmental destruction and the employment of modern slave labor have been closely associated with cattle ranching for decades (Greenpeace 2009, Compliance Advisor Ombudsman 2018, MPT 2017). Today, there is a demand to combat both of these social and environmental problems in the cattle industry. In the Amazon for example, recent deforestation related to cattle production has led environmentalists to launch initiatives (Garret et al. 2019; Alix-Garcia and Gibbs 2017). However, labor violations associated with forest clearing for grazing have received less attention. The debate over approaches to protect workers is urgent because global demand for beef ~~meat~~ has increased from 28 million tons per year in 1961 to 68 million tons in 2014 (Ritchie and Roser 2017; FAO 2019). Pasture expansion requires recruiting poor workers to clear it (Jackson et al. 2020) and some cattle ranchers treat poor workers as goods. The literature describes them as slave laborers (McGrath 2013), forced laborers (Belser 2005), and modern slave laborers (Gold, Trautrim and Trodd 2015; Crane 2013; Bales 2016).

In my previous chapters I described efforts to fight modern slave labor via commodity chain agreements and state agency regulations. Here I focus on the financial sector. The international financial sector has always been concerned with managing credit risk and ensuring that banks hold sufficient cash reserves to meet their financial obligations and survive in financial and economic distress (Lall 2012). This concern gave rise to the Basel Accords, adopted to create an international regulatory framework. However, the first two Basel Accords (Basel I and II, implemented in 1988 and 2004, respectively) were not sufficient to protect the global financial system from the 2008 financial crisis. Basel III identified the main causes of the 2008 financial crisis, which included poor liquidity management and corporate governance (Sun, Stewart, Pollard 2011; Choudhry and Landuyt 2010). Now, through the guidelines established by

the Basel III Accord, banks around the world have been redesigned to strengthen prudential regulation and risk management to prevent another financial collapse (Delimatsis 2012).

In response to Basel III, the Central Bank of Brazil issued new regulations in 2014 requiring financial institutions to assess the social and environmental risks of their activities and transactions before granting credits (Talpeanu-Enache 2015). The issuance of Resolution No. 4,327 of 2014 by the Central Bank of Brazil was an important national milestone signaling that the country is aware of these risks and has a policy to mitigate them. After Resolution No. 4,327/2014, the Brazilian Federation of Banks - FEBRABAN - issued Guideline No. 14 - "Guidelines for the Creation and Implementation of the Policy of Socio-environmental Responsibility". FEBRABAN lays out the methods that banks and customers should follow for effective compliance with social and environmental risk assessment. One of the goals of these norms is to avoid damage to the images of the banks arising from granting credit to customers who are engaged in deforestation and/or practice modern slave labor (Guideline n. 14/2014 - FEBRABAN). In 2017, the Central Bank of Brazil issued Resolution No. 4,553 to fully apply the Basel III recommendations to large banks and banks with relevant international activity in Brazil (Carvalho et al. 2017).

To date, however, there is a lack of information on how modern slave labor has been addressed by national banks, especially in relation to activities such as cattle ranching in Brazil. Therefore, this chapter will explore the conditions that banks impose to avoid financing projects that involve modern slave labor, answering the following research questions:

- What conditions related to modern slave labor do banking institutions in Brazil before granting loans?

- Do banks that follow Basel III recommendations are more likely to be signatories to the Equator Principles, the UN Principles for Responsible Investment, and the National Pact to Combat Modern Slavery? Do banks following the Basel III recommendations ask for more requirements coming from national standards than banks that are not signatories?
- Do Brazilian banks address modern slave labor in cattle production differently than in other activities?

2. Literature Review

In February 2021, banks in Brazil invested R\$55 billion (almost \$10 billion) in Brazilian agricultural companies. Six national banks⁴ - Banco do Brasil, Bradesco, BTG Pactual, Caixa Econômica Federal, Itaú, and Santander - have invested 25% of this amount in economic activities related to cattle and other livestock farming (Banco Central do Brasil 2021). Loans are intended to cover, for example, raw material for cultivation and purchase of equipment and animals. However, there have been accusations that the credit provided by the banks are contributing to deforestation (Kaynar et al., 2020) and modern slave labor (Amigos da Terra 2012). Given the possibility that bank credit is being used to degrade the environment and increase social problems, the literature has expanded to study how banks can play a role in addressing problems such as modern slave labor and deforestation.

⁴ These six banks are considered large banks because they have 10% of the Gross Domestic Product (GDP) or because they are engaged in relevant international activity, regardless of the size of the institution. Because of this they are required to follow the Basel Accord guidelines.

Some studies have attempted to assess how the financial sector, especially banks, have dealt with the environment in Brazil. Santana, Leuzinger, and de Souza (2021) point out that national regulations impose certain environmental conditions that bank clients must meet in order to have their credit approved, one of these conditions being the issuance of an environmental license by the relevant state environmental agency (Santana, Leuzinger, and de Souza 2021). They conclude that financial institutions, by making compliance with environmental regulations a precondition for granting credit, can impact the issuance of the environmental license. Schlischka et al. (2009) explore what environmental information is requested when granting credit to clients. The method they used was to send a questionnaire to ten banks in 2005⁵. Among the questions asked, they sought to learn about the size of the borrowing companies, the purpose and products of the credit, and the sustainability standards and criteria of the social and environmental policies used by the financial institutions in formulating their lending methodologies. They found that credit was granted to micro, small, medium, and large companies, which could be private, public, or cooperative. The credit funded, among other things, reforestation of permanent preservation areas and legal reserves, and investments in new socio-environmental projects (e.g. organic farming). They also verified that the adoption of socio-environmental criteria in the credit policy of some banks went beyond the legal requirements. Banks considered whether clients complied with Brazilian environmental legislation, and banks also applied international voluntary standards such as the Equator Principles.

Few studies focus on how banks address the problem of modern slave labor in relation to their clients in the cattle sector. Cockayne and Oppermann (2018) point out that dirty lists have

⁵ Even though the questionnaires date back to 2005, which was developed years before Basel III, the questions raised are still relevant for understanding how banks deal with socio-environmental issues.

become "key indicators by which Brazil's financial sector assessed social risk." Repórter Brasil and Biofuel Watch Center (2011) also highlighted that banks should check the dirty list before granting credit. However, they point out that the dirty list is limited in scope and more monitoring must be done. This requires looking not only at national regulations that oblige banks to check certain documents (e.g., the dirty list), but also understanding guidelines beyond legal requirements, such as optional international and national standards, what conditions clients must meet to obtain credit from banks, whether there is different treatment for cattle ranching, and how some national banks that follow Basel III recommendations have imposed conditions when granting credit. Achieving this comprehensive understanding is one of the objectives of this study.

Brazilian Banks and the Conditions for Granting Credits

The national banks that follow the Basel III recommendations must analyze the credit risks related to modern slave labor. To avoid social risks such as modern slave labor, banks can rely on the international standards of the Equator Principles and the United Nations Principles for Responsible Investment, and national ones such as the National Pact to Combat Slave Labor, Resolution No. 4,327/2014 and Resolution No. 3,876/2010 of the Central Bank of Brazil, and FEBRABAN Guideline No. 14. The number of conditions adopted by banks may signal that an institution is more committed to analyzing the risks associated with modern slave labor.

One of the international standards adopted by national banks is established by the United Nations Environment Programme Finance Initiative and the United Nations Principles for Responsible Investment. In 2006, the United Nations Global Compact and the United Nations Environment Programme Finance Initiative launched the Principles for Responsible Investment to promote consideration of Environmental, Social, and Governance (ESG) issues by the

financial sector. The intention is to evaluate ESG issues before decision-making. The United Nations Environment Programme Finance Initiative agenda now seeks to adopt tools that can positively impact society and envisions the incorporation of human rights and equity as a core principle to promote an "inclusive" green economy, meaning “low-carbon, resource efficient and socially inclusive” (Loiseau et al. 2026, p. 361; Gond and Piani 2013; Kobayashi and Kaneko 2014).

Investors that are signatories to the Principles for Responsible Investment commit to the following six principles:

- Principle 1: We will incorporate ESG issues into investment analysis and decision-making processes.
- Principle 2: We will be active owners and incorporate ESG issues into our ownership policies and practices.
- Principle 3: We will seek appropriate disclosure on ESG issues by the entities in which we invest.
- Principle 4: We will promote acceptance and implementation of the Principles within the investment industry.
- Principle 5: We will work together to enhance our effectiveness in implementing the Principles.
- Principle 6: We will each report on our activities and progress towards implementing the Principles.

The Principles for Responsible Investment are premised on the fact that ESG can affect investment performance and they have become the foremost international Responsible

Investment (RI) initiative. They drive the financial industry to manage assets and help identify best practices among investors. Investors commit to being active owners, meaning that they should consider ESG issues in their policies and practices (PRI 2018). When there is ESG consideration, there are superior risk-adjusted returns. Thus, the application of the Principles for Responsible Investment can curb some clients' actions that could harm the environment and human rights by using the credit provided by banks (Sievänen, Rita and Scholtens 2013; Vitols 2011, Kobayashi and Kaneko 2014; Orozco, Barón and Gómez 2012).

The Equator Principles are another international standard adopted by some national banks. The Equator Principles are an initiative of the World Bank and the International Finance Corporation and provide international benchmarks, composed of traditional economic and financial criteria and social and environmental viability parameters, for environmentally and socially appropriate lending for large investment projects. The Equator Principles guide the international banking industry in providing financing for projects that may have negative impacts on people and the environment. The ten principles include: Review and Categorization; Environmental and Social Assessment; Applicable Environmental and Social Standards; Environmental and Social Management System and Equator Principles Action Plan; Stakeholder Engagement; Mechanism for Action; Independent Review; Covenants; Independent Monitoring and Reporting; and Reporting and Transparency (Equator Principles 2020).

Banks that are signatories to the Equator Principles must rate the social and environmental risk of projects from A (high risk), B (medium) to C (low). Category A projects have the potential to generate significant, irreversible, or unprecedented socio- environmental impact. Category B projects have potentially limited, minor, site-specific impacts that are reversible and easy to correct by mitigation. Category C projects have minimal or no risk. If the

project risk is category A, the principles recommend an external analysis with specialized consultants. Analysis for projects ranked B should be in-depth, but can be done by an internal team from the bank or, in some cases, by an external team. Category C indicates that the project can be approved. The determination of which category the project falls into is made after submission of information by the clients, consultants, and the bank's assessment of the project to be financed.

In Brazil, only a few national banks have endorsed the Equator Principles, as they are voluntary. However, being a signatory to the Equator Principles signals, as with the United Nations Environment Programme Finance Initiative, the banks' commitment to avoiding exposure to risks related to the environment and to human rights violations, such as modern slave labor. Thus, it is inferred that signatories to the Equator Principles require clients to comply with more social and environmental criteria (Dias and Oliveira 2011).

The Central Bank of Brazil, the country's regulatory and supervisory authority, issued Resolution No. 4,553/2017 to categorize the Brazilian financial system into five segments. The division is based on the size, international activity, and risk profile of the banks. Broadly defined, the S1 segment would be banks with total exposure equal to or greater than 10% of gross domestic product (GDP) or that are internationally active. The S2 segment would be banks with a size of 1 to < 10% of GDP. The S3 segment would be banks from 0.1 to < 1% of GDP. The S4 segment is banks with a < 0.1% of GDP. The S5 segment would be banks smaller than 0.1% of GDP. Once the segmentation is determined, the intention is to demand the full implementation of the Basel III rules for the S1 segment, in this case six national banks. For banks in other segments, the intention is to require prudent requirements that fit the risk profile of these banks (Carvalho et al. 2017). So, the six national banks should deeply focus on national standards such

as Resolution No. 4,327/2014, and the Guideline No. 14 from the Brazilian Federation of Banks – FEBRABAN.

Among the national standards that guide the practices of national banks seeking to avoid granting credit that finance modern slave labor, are the National Pact to Combat Slave Labor, Resolution Nos. 3,876/2010 and 4,327/2014 of the Central Bank of Brazil, and FEBRABAN Guideline No. 14. The National Pact to Combat Slave Labor is an agreement in which companies and civil society organizations promise to rule out any possibility of using modern slave labor in the supply chain of their products and services. Since May 2005, approximately 200 companies have joined the National Pact to Combat Slave Labor. Thus, while the National Pact to Combat Slave Labor is a voluntary agreement that some banks may adhere to, the bank's adherence may signal a greater concern of the signatory bank about modern slave labor.

Resolution No. 4,327 of the Central Bank of Brazil, applied as of 2014, requires that Brazilian financial institutions and other institutions authorized to operate in Brazil by the Central Bank of Brazil must draft their own Social and Environmental Responsibility Policy. The Social and Environmental Responsibility Policy must contain principles and guidelines that guide actions of a social and environmental nature in business and in relationships with stakeholders. The objective is for financial institutions to manage social and environmental risks and to avoid financial losses arising from these risks. In the case of economic activities with higher potential for causing socio-environmental damage, the financial institutions must establish specific criteria and mechanisms for risk assessment. The risk analysis can follow some guidelines, such as those of the World Bank, which levels the high, substantial, moderate, and low risks and establishes some parameters that can be adopted to insert the activities in each degree of risk (World Bank 2017). The Policy of Social and Environmental Responsibility

guides, therefore, how banks should conduct the analysis of credit concession. However, each bank is permitted to build its own internal guidelines to apply in the credit analysis. Thus, each bank prepares its own internal documents based on the voluntary standards, and these documents will guide the banks' assessment of each of their clients.

FEBRABAN's Guideline No. 14 formalizes fundamental principles and procedures for the incorporation of social and environmental risk assessment and management practices in business and in relations with stakeholders. The financial transactions carried out between banks and clients must consider how the credits will be used, and observe both the law and the social and environmental rules established by FEBRABAN and the Central Bank of Brazil. One of the objectives of the law and other norms is to avoid damage to the bank's reputation – which reveals how well or not different groups of people view a commercial name - that can arise from granting credit to clients that practice modern slave labor (Normative No. 14/2014 - FEBRABAN) (Larkin 2003). Resolution No. 3,876/2010 of the Central Bank of Brazil prohibits the provision of rural credit to anyone who is on the dirty list. Therefore, there are international and national standards that national banks can (or should) apply to avoid being associated with the financing of projects linked to modern slave labor. The lawsuit would require that the banks comply with the national norms, and also compensation for damages already caused as a result of noncompliance.

3. Methods

To run the analyses, I examined Socio-environmental Responsibility Policies -- all dated 2015 -- of six national banks (Caixa Econômica Federal, Banco do Brasil, Banco Safra, SANTANDER, BTG Pactual and Bradesco). The selection of the banks was based on access to

the Social-environmental Responsibility Policies made publicly available through lawsuits filed by the Federal Labor Prosecutor's Office against the six banks mentioned. The Federal Labor Prosecutor's Office filed the lawsuits to, among other things, encourage banks to redraft their Social and Environmental Responsibility Policies focusing more on the identification of social and environmental risk related to violations such as modern slave labor, and to add to their Policies guidelines capable of guiding the bank's actions and orienting the decisions of their employees, including procedures that can identify, classify, evaluate, monitor, mitigate and control socioenvironmental risk. As a defense, the banks provided a whole set of documents that summarized their own Social and Environmental Responsibility Policies, informed the labor court how the implementation of the Policies occurs, which international and national standards they were committed to comply with; and described which conditions the banks comply with in their practice to analyze the granting of credit to the client. My study was based on the checking of all these six lawsuits (total 13,970 pages), which I read a total of 3,329 pages of documents related to the Social-environmental Responsibility Policies of the six banks and the answers from the banks on how they apply their own Policies. I gained access to the six lawsuits via the website of the Labor Court of São Paulo, Brazil (trt2.jus.br). The description of the whole set of documents that compound the Social-environmental Responsibility Policies of the each of the six banks analyzed and other documents analyzed is given in the table 1.

I reviewed records from the six banks for:

- Whether they follow the Basel III recommendations;
- Whether they were large banks (based on definition included in Resolution No. 4,553/2017, from the Central Bank of Brazil);

- Whether they were signatories to the Equator Principles, United Nations Principles of Responsible Investments, and National Pact to Combat Slave Labor; and
- Whether they report following conditions described in Resolution No. 4,327/2014 and Resolution No. 3,876/2010 of the Central Bank of Brazil, and FEBRABAN Guideline No. 14;
- Whether they report whether these protocols were mandatory or voluntary;
- Whether they report which of the conditions that come from the national standards are applicable only to cattle raising.

Table 1. The Social-environmental Responsibility Policies and other documents analyzed according to each bank.

Banks	Documents
Banco do Brasil	Socio-environmental Responsibility Policy; 2015 Annual Report, Banco do Brasil Sustainability Guidelines for Credit, Equator Principles; BB Socio-environmental Actions, Corporate Socio-environmental Responsibility; Credit concession contact minutes; Bank Credit Note, rural pledge credit bill, Customer analysis for credit concession; Socio-environmental Questionnaire; and Bank's Defense
Banco Safra	Socio-environmental Responsibility Policy; Socio-environmental Risk Management Policy and Structure; Socio-environmental Risk; Socio-environmental Risk Management Report; Meet your Customer Questionnaire; Socio-environmental Risk Assessment; Credit Bill, Bank Credit Bill; Lease Contract; Foreign Exchange Contract; Bank's Defense; SAFRA Manifestation; Corporate Credit Policy;

Banks	Documents
Banco Santander	Standards Management Policy; and Training Course attended by bank staff. Socio-environmental Responsibility Policy; Training Course on Socio-environmental Responsibility; Training Course on Socio-environmental Risk; Socio-environmental Risk; Socio-environmental Questionnaire; Socio-environmental Opinion; Contracts (e.g. credit granting; provision of services); Engagement Policy with Stakeholders; Commercialization of Products and Services Policy; and Instruction Manual for analysis of socio-environmental credit risk for companies.
BTG Pactual	Global - ESG Risk Management Policy; ESG Risk - BTG Pactual, ESG Risk Governance; GLOBAL - Socio-environmental and Corporate Governance Policy; Final Report from Applied Consulting; Complain from the Federal Labor Prosecutor; and Bank's Defense. Socio-environmental Responsibility Policy; Socio-environmental Risk; Socio-environmental Risk Analysis;
Banco Bradesco	Checklist for Socio-environmental Risk Analysis; Socio-environmental Monitoring Report; Bank's Defense; Socio-environmental Responsibility Standard; and Bank Credit Bill.
Caixa Econômica Federal	Complain from the Federal Labor Prosecutor; and Bank's Defense.

4. Findings

I found that Central Bank of Brazil Resolutions N° 4,327/2014 and N° 3,876/2010 and FEBRABAN Guideline N° 14 require banks to:

- include in the contract with the client an early maturity clause for cases in which there is an unappealable judicial decision for the use of modern slave labor;
- disclose the economic activities that the bank considers of high socio-environmental risk;
- require the client to complete a socioenvironmental risk questionnaire;
- require the client to comply with the labor legislation;
- avoid transactions that damage the reputation of the bank; and
- not grant loans to any client on the dirty list.

All requirements are mandatory before a loan is issued, except the early maturity clause. I found out that five banks - Caixa Econômica Federal, Banco do Brasil, Banco Santander, BTG Pactual and Banco Bradesco - are in the S1 segment, and must follow the Basel III recommendations. All five banks are signatories of the Equator Principles and the UN Principles for Responsible Investment. Only two banks (Banco do Brasil and Banco Santander) were signatories of the National Pact to Combat Modern Slave Labor.

However, I observed that the five banks mentioned comply differently with the national requirements described in Resolutions Nº 4,327/2014 and Nº 3,876/2010 of the Central Bank of Brazil and FEBRABAN Guideline Nº 1. Caixa Econômica Federal and Banco do Brasil comply with all the requirements mentioned in Central Bank of Brazil Resolutions Nº 4,327/2014 and Nº 3,876/2010 and FEBRABAN Guideline Nº 14. Banco Santander and Bradesco do not comply with the optional requirement - the early maturity clause, and do not comply with at least one mandatory requirement. BTG Pactual only stated that banks must have a list of economic

activities considered to be of high socio- environmental risk, but did not inform whether the bank has its own list.

Banco Safra, which is not a signatory to any of the international guidelines - Equator Principles, UN Principles for Responsible Investment, or the National Pact to Combat Modern Slave Labor - is not in the S1 segment, just does not meet the national requirement to display which economic activities are considered high-risk. In terms of the number of requirements, the only non-signatory bank meets the same number of mandatory requirements as signatory banks Santander and Bradesco.

Four of the five signatory banks of the Equator Principles and the United Nations Principles for Responsible Investment disclosed cattle ranching as one of the economic activities they consider of high socio-environmental risk. However, although they agree that cattle ranching is high risk, I did not find information that would point out if there are more national requirements that clients whose activities are in that sector must fulfill in order to get credit from these banks. What I did find out, instead, is that, regardless of the economic activity developed by the client, all banks forbid lending money to those who are on the dirty list, and all banks are concerned about the bank's image when lending to clients. (For a detailed analysis of each bank analyzed, see appendix)

Table 2. Summary of requirements on modern slave labor requested by prominent Brazilian banks when lending money

	V/M/ NA ¹	Basel III					No Basel III
		Caixa Econômica Federal	Banco do Brasil	Banco Santander	Banco BTG Pactual	Banco Bradesco	
Equator Principles							
United Nations Principles of Responsible Investments							
National Pact to Combat Modern Slave Labor							
Early maturity clause due to an unappealable judicial decision for the use of modern slave labor	NA	✓	✓	✓ ¹²	✓	✓	No
Economic Activities	NA	✓	✓	✓	✓	✓	No
Socioenvironmental risk questionnaire	NA	No	✓	✓	No	No	No
Compliance with labor legislation	V	✓	✓	No	✓	No	✓
Bank Reputation	M	✓ ¹³	✓ ¹⁴	✓ ¹⁵	✓ ¹⁶	✓ ¹⁷	No
Dirty list	M	✓ ¹⁸	✓	✓ ¹⁹	✓	No	✓
1 V – Voluntary		✓	✓	No	✓	✓	✓
M – Mandatory		✓	✓	✓	✓	✓	✓
NA – Not Applicable		✓	✓	✓	✓	✓	✓
2 Socio-environmental risk analysis in projects that also do not have the Equator Principles in scope							
3 Agriculture, civil construction, electric energy, commercial planted forests, cattle raising, food, textiles, and housing							
4 Agribusiness, electric energy, civil construction, mining, oil and gas, transportation, irrigated agriculture, and cellulose and paper industry.							
5 Oil or natural gas, mining, metallurgy and related, lumber, energy, industry in general, Agriculture and cattle raising, hospital and laboratory, solid waste, transportation in general, civil construction, construction company, fishing and use of biological diversity							
6 Bank D is silent on what economic activities should be regarded as having high socioenvironmental risk							
7 Group 1: Weapons and ammunition, radioactive materials, lumber, asbestos fibers, and tobacco.							
Group 2: Airports, railroads, ports and highways, agriculture and cattle raising, tannery, building material factory, energy, hospitals and laboratories, industries (i.e. steel), waste management facilities, fishing, petroleum or natural gas, and sanitation.							
8 For operations greater than \$10 million							
9 For the oil or natural gas, mining, metallurgy and related, lumber, energy, industry in general, Agriculture and cattle raising, hospital and laboratory, solid waste, transportation in general, civil construction, construction company, fishing and use of biological diversity sectors							

5. Discussion and Conclusion

One of the conclusions of my study is that Central Bank of Brazil Resolutions and the Brazilian Federation of Banks – which are national norms - establish six requirements related to modern slave labor that banking institutions in Brazil must follow to grant credit to clients.

Being a Brazilian bank in the S1 segment, meaning that they must follow the Basel III Recommendations, has an impact on being a signatory to the Equator Principles and the United Nations Principles of Responsible Investments. However, on the requirements for banks to lend money to the client stemming from national norms, we found no differences in practice between the number of requirements adopted between the Equator Principles and United Nations Principles of Responsible Investments signatory banks (S1 segment) and the non-signatory bank of these international norms (non-S1 segment bank). But this conclusion deserves caution.

The Central Bank of Brazil and the National Federation of Banks could expand requirements, using national regulations, regarding modern slave labor in non-S1 banks in order to prevent companies with this social risk from being financed by smaller banks. The additional requirements could focus specifically on activities such as cattle breeding.

Focusing on the cattle raising activity, I noticed that most banks presented this activity as requiring specific attention for financing because it has a high socioenvironmental risk. But I did not find evidence from the non-S1 segment bank about any requirement imposed specifically for this activity. So I recommend that the Central Bank of Brazil and the National Federation of Banks issue new requirements that must be fulfilled by the non-S1 banks. Some of the requirements could be: (i) statements that there are no modern slave labor investigations by labor inspectors against the client; (ii) statements that there are no ongoing criminal or labor lawsuits against the cattle ranchers. Such statements could improve the bank's assessment of the risk of

lending to potential violators of worker freedom and dignity. Thus, the bank could decrease the possibility of financing cattle ranching projects with potential use of modern slave labor.

The findings demonstrate, therefore, that banks have potential to emerge as another private actor in the fight against modern slave labor in the cattle supply chain. Banking institutions have already taken an important step in improving the fight for increased worker protection. All initiatives are important to combat modern slave labor in a context where there is no technology to monitor cattle ranches. Attacking the financing of potential users of modern slave labor is a strong mechanism to curb social exploitation in the countryside.

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Appendix for Chapter 3

Caixa Econômica Federal

Caixa Econômica Federal reports that it is a signatory to the Equator Principles and the United Nations Principles of Responsible Investments, but not to the National Pact to Combat Slave Labor. The bank identifies economic activities with higher socio- environmental risk, they are: Agriculture, Civil Construction, Electric Energy, Commercial Planted Forests, Livestock, Food, Textile, and Housing. The socio- environmental questionnaires are required when credit operations are over \$10 million, but there is no information about which questions are asked of the clients. Caixa Econômica Federal requires clients to obey labor legislation, including laws relating to child labor and modern slave labor. There is a clause for early maturity of the debt in case there is an unappealable judicial decision for the use of modern slave labor. The social and environmental risk assessment also checks if the client has the potential to threaten the bank's image and if there is an assessment of whether or not the client uses modern slave labor. Caixa Econômica Federal emphasizes that it denies credit to clients, partners, guarantors, or companies of the conglomerate that are included in the Dirty List.

Banco do Brasil

Banco do Brasil reports that it is a signatory to the Equator Principles, the United Nations Principles of Responsible Investments, and the National Pact to Combat Slave Labor. Banco do Brasil defines 8 economic sectors as areas of higher socioenvironmental

risk: agribusiness, electricity, construction, mining, oil and gas, transportation, irrigated agriculture, and pulp and paper. When the economic activity has socioenvironmental risk category A, Banco do Brasil may assess documents to check client's compliance with human rights, and request audits to assess the client's risk. The client is asked to fill out a socioenvironmental questionnaire, but no questions related to the practice of modern slave labor are included. Banco do Brasil does not lend to clients that do not comply with the legislation in force, that submit workers to degrading forms of work and conditions analogous to slavery, that have legal restrictions or that harm the image of Banco do Brasil. The bank checks client names against the dirty list. However, Banco do Brasil requests additional information with a copy of the documents from the proceedings that gave rise to the inclusion in the dirty list and requires a declaration from the client about the non-existence of a final administrative decision sanctioning modern slave labor. Banco do Brasil includes the possibility of early maturity of the client's debt if there is an unappealable judicial decision that sanctions the practice of acts such as modern slave labor.

Banco Safra

Banco Safra is not a signatory to the Equator Principles, United Nations Principles of Responsible Investments, or the National Pact to Combat Slave Labor. The documents analyzed did not present information as to which economic sectors they consider to have higher socioenvironmental risk. Clients must answer a socioenvironmental risk questionnaire, whose objective is to find out and give the client the opportunity to inform if there is any modern slave labor accusation. One of the questions in the questionnaire is whether the client has been fined for labor problems. The documents analyzed showed that the bank's clients have an obligation to

obey the labor law, involving health and occupational safety, and to refraining from engaging in practices of modern slave labor. In addition, there is a clause of early maturity of the debt in cases of final and unappealable judicial decision that recognizes the practice of modern slave labor by the clients. There is an attention to unflattering news published about the client, which can be reports about the use of modern slave labor. Banco Safra feeds the dirty list into the internal system and if a client is listed, the bank's internal system blocks the client, signaling that the relationship with the client is discontinued.

Banco Santander

Banco Santander is a signatory to the Equator Principles, the United Nations Principles of Responsible Investments, and the Pact for the Eradication of Slave Labor. The bank applies social and environmental risk analysis and when any problem is detected, the bank works with the client to overcome any problem that is presented. Bank Santander identifies 14 sectors with higher socioenvironmental risk potential, which are: oil or natural gas, mining, metallurgy, lumber, energy, industry in general, agriculture and cattle raising, hospital and laboratory, solid waste, transportation in general, civil construction, construction company, fishing and use of biological diversity. Clients that fall into any of the 14 sectors must undergo a specific risk assessment and answer a socioenvironmental questionnaire. The questionnaire aims to find out information about the client's socioenvironmental and occupational health and safety management practices. The answers are analyzed by the socioenvironmental risk team, and the data are checked by trained personnel with external and internal sources of information. If in doubt, the client is contacted or visited. One of the fields in the questionnaire is whether the client has degrading/slave-like labor. Bank Santander also checks if the client is dirty listed and if there is any mention on Google related to modern slave labor. If the client is not on the dirty list

and credit is granted to the client, the client is followed up and new evaluations are made annually. I did not find information on whether the bank requires the client to obey labor legislation and if there is a clause of early maturity of the debt in case of a final court decision due to the practice of modern slave labor.

BTG Pactual

BTG Pactual is a signatory to the Equator Principles and the United Nations Principles of Responsible Investments. However, it is not a signatory to the National Pact to Combat Slave Labor. BTG Pactual has a special focus on conditionalities related to modern slave labor. The socioenvironmental analysis considers environmental and social risks. Among the social risks, the bank looks at the susceptibility of the business activity to modern slave labor practices, and whether the client is voluntarily committed to the National Pact to Combat Modern Slave Labor. Bank BTG Pactual requires from the client to complete a socioenvironmental questionnaire. On issues related to modern slave labor, the questionnaire asks whether the client is involved in legal proceedings and/or administrative procedures involving social and environmental issues, requests the presentation of documents that show that the client complies with the labor norms, and requests information on whether the client has specialized staff in environment, health and work safety. The bank's risk assessment follows the procedure of consulting public data, which includes checking the dirty list, determining if there is any pending administrative or judicial trial, and conducting a Google search for any mentions of modern slave labor involving the client.

There is a specific socioenvironmental governance area that will indicate to the legal team socioenvironmental risk clauses that should be incorporated in the operation contracts, aiming at reducing the bank's socioenvironmental risk. The clauses are structured based on each

business activity of the client and on the social and environmental risk identified after the analysis of the specific area. However, no information was found on whether there are predetermined areas of higher risk. For high-risk operations, the contract may include social and environmental clauses that aim to ensure monitoring.

Banco Bradesco

Banco Bradesco reports that it is a signatory to the Equator Principles and the United Nations Principles of Responsible Investments. However, it is not a signatory of the National Pact to Combat Modern Slave Labor. Bank Bradesco informs that it has developed differentiated mechanisms for analyzing operations in sectors with higher socioenvironmental risk exposure and that it divides clients into two groups. The first group deals with the economic activities of weapons and ammunition, radioactive materials, lumber, asbestos fibers, and tobacco. The second group deals with: airports, railroads, ports and highways, agriculture and cattle raising, tanneries, building materials, energy, hospitals and laboratories, industries (e.g. steel), waste management facilities, fishing, petroleum or natural gas, and sanitation. I did not find information on whether Bank Bradesco requires clients to complete a social and environmental questionnaire. But it does require the client to comply with labor legislation while the contract with the Bank is in force. Bank Bradesco analyzes whether there are labor proceedings and final and unappealable judgments for acts that violate labor laws in order to analyze the client's socioenvironmental risk. I found that there is a credit denial only to clients on the dirty list. I did not find information on whether there is a clause of early maturity of the debt in case of an unappealed judicial decision due to the practice of modern slave labor.