

Embedded Dysfunction: The Formation Process of U.S. Conflict Minerals Regulation

Chapter 1: Introduction

1.1 Background:

The eastern Democratic Republic of the Congo (DRC), rich in mineral resources such as tin, tantalum, tungsten, and gold —collectively referred to 3TG, has suffered decades of severe conflict and humanitarian crisis that has claimed up to 6 million lives since 1998 (Seay 2012: 6). Since the early 2000s, the extraction and trade of these resources have been identified by UN expert panels and NGOs as financing armed groups, perpetuating conflict (UN Security Council 2001), and contributing to widespread human rights abuses including sexual violence and child recruitment (Moncel 2015: 221). Simultaneously, these minerals flow through global supply chains to consumer markets in developed countries as essential raw materials for manufacturing electronic devices such as smartphones and computers. This creates a direct link between consumers and violence in the Great Lakes Region.

To sever these economic ties, policymakers established a global regulatory framework around 2010. The most significant development was the enactment of Section 1502 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) in the United States (Inoguchi 2017). This legislation mandated companies listed with the U.S. Securities and Exchange Commission (SEC) to investigate whether the 3TG minerals used in their products originated in the DRC or its neighboring countries, to conduct due diligence (DD) to ensure non-involvement in conflicts, and to report the results annually (ibid.). This introduced a new approach called “resource due diligence,” demanding corporate transparency and responsible sourcing (Hanai 2021: 1).

1.2 Problem Statement

More than a decade after implementation, the link between mineral resources and conflict in eastern DRC remains unbroken facing "multi-layered dysfunction" (Hanai 2022: 1-2).

Downstream, as the U.S. Government Accountability Office (GAO)¹ has consistently reported, many companies cannot identify mineral origins, and due diligence remains a procedural exercise (GAO 2024: 2). Upstream in the DRC, the regulation has produced paradoxical outcomes rather than the intended conflict deterrence: traceability schemes have become laundering mechanisms, legitimate artisanal miners have been excluded from markets, and violence by armed groups has instead intensified (Inoguchi 2017: 23, 25; Parker & Vadheim 2017: 43).

¹ The Role of the U.S. Government Accountability Office (GAO): In the context of the Dodd-Frank Act Section 1502, the GAO was given a specific oversight and reporting mandate by the law itself. Its role is that of an "official evaluator," tasked with objectively assessing for Congress whether the conflict minerals regulation is achieving its goals.

This multi-layered dysfunction suggests not merely implementation failures but structural defects embedded in the regulation's design itself. In recent years, regulatory hollowing out through litigation has further deepened this dysfunction.

1.3 Research Question and Analytical Framework

Most existing research has analyzed these dysfunctions as "post-implementation outcomes" (Parker & Vadheim 2017; Stoop et al. 2018; Hanai 2021; GAO 2024). This study instead addresses the "formation process": Why was a system embedding such structural defects created in the first place?

Understanding the root causes of current dysfunction requires analyzing not only post-implementation challenges but also the stage at which regulation was conceived and designed. This study applies Hyde-Price's (2004) framework of identities/ideas, interests, and institutions²—developed for EU foreign policy analysis and applied to conflict minerals regulation by Vlaskamp (2018) — examining how narratives, political compromises, and institutional constraints shaped regulatory outcomes.

Adapting Vlaskamp's analysis to the Dodd-Frank Act, this study advances the hypothesis that Section 1502's structural defects were embedded through three interconnected mechanisms: (1) simplified problem framing that ignored supply chain complexity (ideas); (2) political compromises between advocacy groups and industry that hollowed out enforcement mechanisms (interests); and (3) institutional constraints created by delegating humanitarian objectives to a financial regulator lacking relevant expertise and enforcement capacity (institutions).

To examine this hypothesis, the thesis proceeds as follows. Chapter 2 documents the multi-layered dysfunction of the regulatory system based on GAO reports and academic research. Chapter 3 then traces how these structural defects were embedded during the 2008-2010 formation process, applying Hyde-Price's framework of ideas, interests, and institutions. Chapter 4 synthesizes these findings to conclude that dysfunction resulted from design defects rather than implementation failures, and presents policy lessons and future research directions.

1.4 Scope, Limitations, and Contribution

This thesis focuses primarily on the U.S. Dodd-Frank Act Section 1502 for three reasons: First, it was among the first legally binding conflict minerals regulations (enacted 2010, implemented 2014), establishing precedents that influenced subsequent frameworks

² Hyde-Price (2004) originally formulated this framework with three dimensions: interests, identities, and institutions, where "identities" refers to the EU's normative identity and shared principles. However, Vlaskamp (2018), whose application of this framework to conflict minerals regulation this study follows, consistently employs "ideas" and "ideational" throughout his analysis, specifically examining the "ideational reasoning" behind policy choices. Following Vlaskamp's analytical approach, this study adopts "ideas" to denote this dimension throughout the analysis while acknowledging Hyde-Price's original terminology.

(Vlaskamp 2018: 12; Woody 2012: 1335). Second, its implementation since 2014 provides over a decade of empirical evidence on downstream corporate compliance and upstream DRC impacts, documented through GAO reports, academic research, and NGO investigations (Hanai 2022: 1; GAO 2024: 16). Third, the regulation's extraterritorial reach—affecting any company listed on U.S. stock exchanges regardless of nationality—extends its impact to global supply chains (Hanai 2021: 1-2).

The analysis examines the formation process during 2008-2010. The geographical focus is primarily on the Democratic Republic of the Congo, with limited examination of impacts in neighboring countries. The analysis relies on government reports (particularly GAO), academic literature, NGO investigations, and corporate filings, with limited direct input from local stakeholders and mining communities.

This study contributes to conflict minerals governance literature by shifting analytical focus from "post-implementation outcomes" to "formation process," demonstrating that structural defects were embedded during the regulatory design phase rather than emerging during implementation.

Chapter2: Dysfunction of Conflict Minerals Regulation

More than a decade after the introduction of Dodd-Frank Act Section 1502, the regulatory system has fallen into multi-layered dysfunction. This chapter examines downstream compliance failures (2.2) and upstream perverse impacts (2.3).

2.1 Design Logic: Why Due Diligence Rather Than Embargo?

Section 1502 adopted a due diligence (DD) approach rather than a total embargo on DRC-origin minerals. While Congress intended to address the humanitarian crisis in eastern DRC (Dodd-Frank Act §1502(a)), it adopted a framework for responsible sourcing through supply chain transparency. The DD approach reflected concerns about blanket bans: such measures risked devastating local livelihoods while the distinction between illegal and legitimate resources remained unclear; moreover, the involvement of neighboring countries' governments and militaries in resource extraction, coupled with Western reluctance to impose sanctions due to political sensitivities regarding Rwanda's 1994 genocide, made comprehensive prohibitions politically unfeasible (Hanai 2014, cited in Inoguchi 2017: 23). This approach was based on the theory that it would enable only conflict-free minerals to reach the market while maintaining legitimate trade channels that support local livelihoods (OECD 2013: 12).

2.2 Downstream Failure

Corporate DD, upon which the regulation relied, has failed downstream due to three factors: ambiguous standards, weak enforcement, and structural costs.

(1) Ambiguous Regulatory Standards

A significant gap exists between regulatory expectations and corporate practice. According to GAO, 53% of companies that submitted reports in 2021 were unable to determine the country of origin of their minerals (GAO 2023: 15-16).

One cause is the ambiguous definition of the regulation's "reasonable country of origin inquiry (RCOI)" standard. As Harline (2015: 445-446) notes, SEC rules do not explain "what specific procedures would be sufficient" and stipulate that "the reasonable inquiry does not depend on, and does not require, representations from every supplier." This ambiguous standard does not mandate 100% response coverage, thus creating a loophole that permits "origin indeterminable" reports (53%).

(2) Weak Accountability Mechanisms

Second, the accountability mechanisms that should ensure regulatory effectiveness are in a state of de facto non-enforcement.

In 2014, an appellate court ruled that part of this regulation—requiring companies to report and state on their websites that products had "not been found to be 'DRC conflict free'"—violated the First Amendment (GAO 2024: 15). In response, SEC staff issued guidance in 2014 and 2017 stating that, "in light of the uncertainty regarding how the [SEC] Commission will resolve those issues [raised by the Court's decision]," the Division of Corporation Finance "will not recommend enforcement action to the Commission" if companies omit descriptions of due diligence (including IPSA—independent private sector audits) from their filings (ibid.: 15-16).

This lack of enforcement has spread the perception among corporations that "the SEC is not reviewing filings and that companies will therefore face no consequence for limiting the information in their filing or for not filing at all" (GAO 2023: 21). As a result, the regulation has been hollowed out from a process substantively investigating complicity in human rights abuses into what companies view as merely a "bureaucratic exercise" (ibid.: 21). In 2022, only 7 out of 1,005 companies (approximately 0.7%) submitted IPSA (audit reports), the core of regulatory credibility (ibid.).

(3) Structural Traceability Difficulties

Third, regardless of corporate intent, structural challenges in obtaining reliable supply chain information prevent effective traceability. According to GAO, 56% of companies received incomplete information from suppliers, and 48% received no response from some

suppliers (ibid.: 18). Gold in particular is "portable, high-value, and fungible," making its tracing extremely difficult and costly (GAO 2024: 36). These data points reflect the underlying complexity of mineral supply chains, where the ability to trace origins depends on cooperation from multiple tiers of suppliers operating in both formal and informal networks—challenges that regulatory design failed to adequately anticipate.

2.3 Upstream Perverse Impact: Certification's Consequential Failures

While downstream failures stem from regulatory defects, upstream dysfunction manifests as perverse impacts where certification schemes designed to ensure conflict-free minerals instead exclude legitimate miners, fail to prevent laundering, and inadvertently fuel violence.

These perverse impacts stem from the design and implementation of certification schemes. The International Conference on the Great Lakes Region (ICGLR) established the Regional Certification Mechanism (RCM), with the ITRI Tin Supply Chain Initiative (iTSCi) serving as the primary industry-led implementation program (Seay 2012: 20-21). Utilizing a method known as "bag-and-tag," iTSCi requires mines to undergo validation—screening for armed group involvement and child labor—before receiving certification tags that authorize mineral export. Through this mechanism, the initiative aimed to establish a "closed-pipeline" model, creating transparent supply chains from validated mines to international markets (Hanai 2022: 27).

(1) The Certification Scheme Failure: Systemic Laundering

The certification system fails at its core function—preventing conflict minerals from entering legitimate supply chains. Global Witness (2022: 16-17, 23-24) investigations in major mining areas such as Nzibira and Lubuhu in eastern DRC revealed that approximately 80–90% of tagged minerals originated from unvalidated mines. Although some claims suggest that militarization significantly decreased from nearly 100% in 2010 to 33% in 2014 (Bafilemba, Mueller, & Lezhnev, 2014, cited in Diemel & Hilhorst 2017: 453), IPIS (2023: 5, 41) reports that 61% of artisanal miners in eastern DRC are still affected by the interference of armed actors, suggesting a persistent systemic breakdown. Despite iTSCi's traceability infrastructure—including mine-site tagging, recording, and third-party audits (Inoguchi 2017: 25)—the system proved unable to prevent minerals from unverified, potentially conflict-linked sources from being laundered through certified supply chains (Global Witness 2022: 3-5).

(2) Exclusion of Legitimate Miners (The De Facto Embargo Effect)

While failing to stop illicit flows, the system also excludes the legitimate artisanal miners it was designed to protect. Even before formal implementation, the regulation

triggered a de facto boycott of Congolese minerals by risk-averse corporations anticipating compliance burdens (Seay 2012: 14). Seay (2012: 14-15) estimates 1-2 million artisanal miners lost employment between 2010 and 2012, affecting 5-12 million dependents who could no longer afford food, school fees, or medical care.

The introduction of certification schemes failed to reverse this exclusion. Cuvelier et al. (2014: 5, 15) document that the strict nature of sourcing protocols made participation "extremely difficult" for artisanal and small-scale miners, while validation teams covered only 5-6% of mining sites in eastern DRC. Inoguchi's (2017: 25) field research documented that iTSCi's procedural costs and delays inflicted "hardship" on miners and traders, "affecting the livelihoods of miners."

(3) Smuggling and Violence Escalation

The exclusion of legitimate miners forced artisanal extraction into illicit channels. Inoguchi (2017: 25-26) documented systematic certification failures—smuggling, origin falsification, and tag trafficking—with weak governance making enforcement "impossible." Parker and Vadheim (2017: 34, 43) found the regulation increased civilian looting by 143-176% and violence against civilians by 44-132%, as militias compensated for lost revenues through predation. The regulation intended to end conflict thus perversely intensified violence.

The upstream system exhibits three structural failures: certification schemes fail to prevent conflict minerals while excluding legitimate miners and fueling the violence they were designed to end.

This chapter has demonstrated that conflict minerals regulation suffers from systematic dysfunction at both downstream and upstream levels. Downstream, weak enforcement and ambiguous standards have reduced due diligence to a bureaucratic exercise, with only 0.7% of companies submitting independent audits and over half unable to determine mineral origins. Upstream, certification schemes produce three consequential failures: they fail to prevent laundering of conflict minerals (the certification scheme failure), exclude legitimate artisanal miners (a de facto embargo effect), and inadvertently fuel violence (a foreseeable outcome of economic exclusion). This multi-layered failure suggests that the dysfunction stems not from inadequate implementation alone, but from structural defects embedded in the regulation's original design. Chapter 3 examines how these defects were built into the system during its formation.

Chapter 3: Formation Process

To understand why a regulatory system embedding such structural defects was created, this chapter applies Hyde-Price's three-dimensional analytical framework to Section 1502's

legislative formation process. Following Hyde-Price (2004) and its application to conflict minerals regulation by Vlaskamp (2018), the analysis examines three distinct yet interrelated factors: Ideas—the normative beliefs and simplified narratives that framed the policy problem; Interests—the competing priorities of advocacy groups, industry actors, and congressional stakeholders that shaped political compromises; and Institutions—the structural constraints inherent in the legislative process. Each dimension reveals how choices during the 2008-2010 formation period directly enabled the downstream failures (Section 2.2) and upstream perverse impacts (Section 2.3) documented in the previous chapter.

3.1: Ideas - The Construction of Simplified Narratives

Advocacy organizations and media campaigns (2008- 2010) constructed simplified narratives that shaped Section 1502's design, embedding two critical oversimplifications that produced the defects documented in Chapter 2. First, a binary 'conflict/conflict-free' framing that ignored supply chain complexity. Second, a linear 'minerals = violence' causality that overlooked conflict's multifaceted roots.

The Narrative Construction: Direct Causality and Moral Imperative

Central to this narrative was a simplified causal story: minerals fund armed groups, armed groups commit atrocities, therefore cutting off mineral revenues will end violence. In April 2009, John Prendergast of the Enough Project declared: "Our insatiable demand for electronics products such as cell phones and laptops is helping fuel waves of sexual violence" (Prendergast 2009: 1), asserting that "there are few other conflicts in the world where the link between our consumer appetites and mass human suffering is so direct" (ibid.).

This simplified narrative was reinforced by concurrent NGO reports and media coverage. Global Witness (2009) published a investigation documenting "war and the militarisation of mining in eastern Congo," while major media amplified the message: Kristof's "Death by Gadget in Congo" (2010) warned that consumer electronics "are built from minerals that seem to be fueling mass slaughter and rape in Congo," and CBS's 60 Minutes (2009) documented how "gold and other minerals are funding the deadliest war since World War II."

This consumer-responsibility framing proved remarkably effective in galvanizing grassroots support (Seay 2012: 9). However, as Seay observes, advocacy efforts were "based on the mistaken assumption that because the mineral trade is one dynamic in some of the region's conflicts, this means that minerals cause conflict" (Seay 2012: 17). The campaigns employed "emotional language, images, and testimony about rape in the Congo to promote the need for legislation...while promising that the violence would abate if the legislation were passed" (ibid.: 23), creating unrealistic expectations about regulatory impact.

Simplified Assumption 1: The "Conflict-Free Binary"

The advocacy narrative constructed a binary framing: minerals are either "conflict" or "clean." This dichotomy embedded a fundamental misunderstanding of supply chain realities—where minerals pass through multiple intermediaries, formal and informal networks overlap extensively, and ores from different sources are routinely commingled.

When Section 1502's disclosure requirements were designed based on this binary premise, they imposed an impossible standard of determination on companies. The regulation demanded definitive categorization where supply chain opacity made such certainty unattainable. This binary framework structurally produced the downstream compliance failures documented in Section 2.2: companies unable to prove "conflict-free" status yet unwilling to declare minerals "conflict-tainted" resorted to evasive "origin indeterminable" reporting, while the impossibility of meeting the binary standard incentivized minimal, bureaucratic compliance over substantive due diligence.

The binary framing's critical flaw was its assumption that complex, opaque supply chains could be reduced to such binary categorizations. This analytical oversimplification became embedded in regulatory design, making downstream dysfunction inevitable.

Simplified Assumption 2: "Cut Mineral Revenues = End Violence"

The narrative's second fatal assumption was that mineral trade was the primary driver of violence, and therefore supply chain purification would bring peace. This linear causality ignored three critical realities:

First, conflict's root causes—land disputes, ethnic tensions, political grievances, governance failures (Stoop et al. 2018: 1, 2, 6; GAO 2024: 30)—were reduced to a single economic variable. Second, armed groups' diverse revenue sources beyond minerals, including taxation, agricultural products, charcoal trade, and looting and pillaging (Stoop et al. 2018: 2; GAO 2024: 27), were overlooked. Third, the narrative did not anticipate that armed groups, when mineral revenues were cut off, would adapt to the situation by substituting with alternative means, such as gold, rather than giving up their guns. (Parker & Vadheim 2017: 1; Stoop et al. 2018: 14).

This oversimplified causality directly enabled the upstream dysfunctions documented in Section 2.3. By framing Congolese minerals as inherently "tainted", the narrative created conditions where risk-averse corporations would pursue total avoidance rather than responsible sourcing—producing the de facto embargo that devastated legitimate artisanal miners. By ignoring armed groups' adaptive capacity, the narrative failed to anticipate that cutting mineral revenues would redirect militias toward violent predation—the violence escalation that Parker and Vadheim (2017) documented.

From Narratives to Structural Defects

These two simplified assumptions formed the basis of Section 1502's regulatory requirements, embedding their flaws directly into the law and producing the dysfunctions documented in Chapter 2. The binary "conflict/conflict-free" logic produced vague RCOI standards that defied implementation in complex supply chains (Section 2.2). The "minerals = violence" causality produced a regulatory approach focused exclusively on supply chain purification while ignoring conflict's root causes and armed groups' alternative revenue streams—ensuring that regulation would simultaneously fail to prevent conflict minerals (certification scheme failure), destroy legitimate livelihoods (de facto embargo), and intensify violence (militia adaptation) as documented in Section 2.3. Furthermore, the consensus among many studies (Hanai 2021 and 2022; Parker & Vadheim 2017; Stoop et al. 2018) is that while this legislation had a certain effect in excluding armed groups from 3T mines, gold—due to its physical and economic characteristics (namely, ease of smuggling and high value)—easily evaded the regulatory net, consequently becoming a new and more intensive target for armed groups to generate funds.

The narrative's moral clarity, which proved so effective at mobilizing grassroots support, came at the cost of analytical clarity about ground realities. Policymakers, convinced by the simplified causal story, designed a regulation embedding the narrative's flaws as structural defects. Chapter 2's multi-layered dysfunction is not an implementation failure—it is the structural outcome of ideas that oversimplified a complex crisis into a binary moral imperative.

3.2: Interests - Competing Priorities and Structural Trade-Offs

While Chapter 3.1 examined the ideas framing Section 1502, this section analyzes the competing interests that shaped its final design. Hyde-Price's "Interests" dimension recognizes that policy outcomes reflect bargaining among actors with divergent priorities (Hyde-Price 2004: 102; Vlaskamp 2018: 5). The primary divide was between pro-regulation advocates—NGOs such as the Enough Project and Global Witness, alongside legislators (Senators Brownback, Durbin and Feingold)—demanding mandatory corporate accountability (Woody 2012: 1317, footnote 5; 1324-1325), and industry coalitions resisting what they viewed as unworkable regulatory burdens (ibid.: 1332-1333). The resulting legislative and regulatory compromises produced a structural trade-off: legal bindingness was secured to satisfy advocacy demands, yet implementation mechanisms were systematically weakened to accommodate industry resistance—creating a regulation that was simultaneously mandatory yet structurally dysfunctional.

Before Section 1502's Legislative Phase

Before Section 1502's Legislative Phase, two legislative proposals emerged: the Conflict Coltan and Cassiterite Act (CCCA) in 2008 and the Congo Conflict Minerals Act (CCMA) in 2009. The CCCA (2008), which proposed import bans and criminal penalties, never received a floor vote (Woody 2012: 1325). Concerned that "all-out prohibitions or blanket sanctions could be counterproductive and negatively affect the very people we seek to help," as Senator Feingold noted (*ibid.*: 1325, footnote 58), the subsequent CCMA shifted from import prohibition to mandatory corporate disclosure (*ibid.*). However, the CCMA also failed to pass as standalone legislation, ultimately securing legal bindingness by being incorporated into the 2010 Dodd-Frank Act as the Brownback Amendment (*ibid.*: 1325-1326). The next section details the further contestation between industry and NGOs during the SEC's rulemaking process.

The SEC's Rulemaking Process

Following the enactment of Section 1502, the SEC's rulemaking process intensified the contestation between regulatory advocates and industry. This section provides an overview of how these respective arguments were ultimately incorporated into the rule and identifies the points where political compromises emerged.

In the final rule, the SEC acknowledged that the regulation would impose significant costs on companies, stating: "We recognize that the final rule will impose significant compliance costs on companies who use or supply conflict minerals, and in modifying the rule we tried to reduce the burden of compliance in areas in which we have discretion while remaining faithful to the language and intent of the Conflict Minerals Statutory Provision that Congress adopted (SEC 2012: 20)." This demonstrates the SEC's conscious attempt to balance congressional intent (regulatory stringency) with industry concerns (practical burdens). Specifically, regulatory advocates prioritized "ensuring information reliability" and "preventing loopholes," while the industry focused on "cost reduction," "mitigation of practical burdens," and "avoidance of legal risks." The following overview examines how regulatory advocates' demands were reflected, how industry concerns were accommodated, and the resulting structural trade-offs.

Regarding legal liability for reporting, the SEC's final rule changed the initial proposal's "furnished" status—which carried lighter legal responsibility—to "filed" status, subjecting disclosures to the liability provisions of Exchange Act Section 18 (*ibid.*: 115-117). NGOs and regulatory advocates such as Senator Durbin strongly argued that "filed" status was essential to ensure information accuracy and investor protection, asserting this reflected congressional intent (*ibid.*: 112-113). Industry countered that conflict minerals information lacked financial materiality and should remain "furnished" (*ibid.*: 109-111) and further expressed concern that inclusion in annual reports (Form 10-K) would excessively burden financial reporting cycles (*ibid.*: 100, 105). Ultimately, the SEC strengthened the rule by

requiring "filed" status for legal liability (ibid.: 115), while accommodating industry's practical concerns by creating a separate reporting form—the new Form SD—with a deadline distinct from annual reports (ibid.: 104-106). Thus, while the SEC accommodated industry's practical concerns through separation of reporting format, regulatory advocates secured the core enforcement mechanism they prioritized most: legal liability under Section 18. This represented a result in which concessions were made on procedural burdens, yet regulatory advocates' demands prevailed entirely on the substance of legal bindingness.

However, industry's counteroffensive quickly neutralized this enforcement mechanism. Arguing that requiring definitive "conflict free" or "not conflict free" labels would "unfairly punish companies that lack complete visibility into their supply chains" and produce "incorrect and misleading disclosures" (ibid.: 185-186), industry secured the "DRC conflict undeterminable" category as a functional escape clause—adopted to address industry's liability concerns regarding definitive disclosures (ibid.: 117-118)—allowing companies to avoid definitive claims subject to liability while supply chain infrastructure remained undeveloped. This strategic concession directly enabled the evasive reporting patterns documented in Chapter 2.2: 53% of companies reporting 'origin undeterminable' and only 0.7% submitting independent audits.

In addition, industry achieved significant operational relief through three additional pathways. First, the RCOI standard was relaxed. The initial proposal would have required due diligence if companies could not prove minerals did not originate in covered countries—effectively demanding "proof of a negative." The final rule modified this to require due diligence only if companies "know" or "have reason to believe" their minerals may have originated in covered countries, explicitly stating this change would reduce costs (ibid.: 151, 274). These operational concessions created the structural conditions for the high rate of "undeterminable origin" reporting documented in Chapter 2. Second, the scope of application was structurally narrowed. The definition of "manufacturer" was tightened to exclude companies merely affixing their brand to generic products or whose minerals do not remain in the final product (ibid.: 65, 85)—a functional requirement that minerals be "contained" in the final product. While the SEC rejected industry calls for a de minimis exemption, maintaining that any amount of conflict minerals triggers disclosure obligations (SEC 2012: 92-94), this containment requirement effectively exempted minerals used in catalysts or manufacturing tools consumed during production (SEC 2012: 89-91), benefiting major retailers through aggressive lobbying (Woody 2012: 1329, footnote 90). Third, recycled and scrap materials received favorable treatment, allowing companies to classify them as "DRC conflict free" without tracing minerals to the mine of origin (SEC 2012: 169, 228-232).

Ultimately, these structural trade-offs produced the very dysfunctions documented in Chapter 2. The regulation's weakening continued even after the rule's adoption. Following legal challenges by National Association of Manufacturers and allied business groups,

appellate courts struck down the 'not found to be DRC conflict free' labeling requirement as compelled speech, leading the SEC to suspend enforcement of this provision (Schwartz 2016: 140-143). The practical impact of these design compromises was equally severe from the outset. In the inaugural filings (2014), only 1,319 companies filed conflict minerals disclosures—merely 22% of the SEC's projection of 5,994 (ibid.: 144). As detailed in Chapter 2, this function has persisted, with approximately 70% failing to identify specific smelters or refiners in the initial phase (ibid.: 153-154). The regulation achieved formal legal bindingness but failed to deliver substantive transparency—confirming that securing passage came at the direct expense of operational effectiveness.

Chapter 3.3: Institutions – Structural Mismatch and the Implementation Gap

Applying the third dimension of Hyde-Price's framework—"Institutions"—this section examines how the specific institutional environment of U.S. policymaking embedded fatal structural defects into Section 1502. Vlaskamp (2018: 6, 16) characterizes this dimension as the complex policy-formation process through which the institutional design (nuts and bolts) of regulation is determined through stakeholder compromises within specific institutional constraints. In the EU case, institutional dynamics led to a "compromise" between mandatory and voluntary measures (ibid.: 16). However, in the U.S. case, institutional factors produced two critical defects: first, a fundamental mismatch between the humanitarian mandate and the financial regulator's institutional capacity (structural mismatch); second, a critical gap between regulatory objectives and actual implementation mechanisms (structural implementation gap).

This section examines how delegating a humanitarian mandate to a financial regulator (the SEC) produced these two defects through three cascading institutional failures. First, this jurisdictional mismatch created both capability and motivation gaps that undermined enforcement (3.3.1). Second, lacking expertise to independently assess conflict-zone realities, the SEC became institutionally vulnerable to industry "feasibility" arguments, forcing regulatory dilution to avoid judicial invalidation (3.3.2). Third, these constraints compelled the SEC to delegate verification functions to unmonitored private entities, creating the structural implementation gap documented in Chapter 2 (3.3.3).

(1) The Agency Mismatch: Delegating Humanitarian Issues to a Financial Regulator

The most critical institutional factor that determined the regulation's outcome was the decision to incorporate Section 1502 into the Dodd-Frank Act, thereby delegating a humanitarian and diplomatic mandate to a domestic financial regulator, the Securities and Exchange Commission (SEC) (Woody 2012: 1316-1317). This decision created a fundamental "institutional mismatch" between the policy's goal and the agency's capabilities (ibid.: 1342). As Woody (2012: 1320) notes, the SEC was founded in 1934 with the mandate

to "(a) protect investors; (b) maintain fair, orderly, and efficient markets; and (c) facilitate capital formation" , but "[n]otably absent from that mandate is any authority or charge to effect international, diplomatic, or human rights-oriented goals".

Requiring the SEC to enforce Section 1502 "stretches thin an already overburdened agency and demands that it oversee diplomatic and humanitarian regulations for which it lacks the institutional competence" (ibid.: 1342). Woody concludes that entities such as the Department of State or the Office of Foreign Assets Control (OFAC) of the Treasury Department, which "handle international affairs," would be a much better fit for conflict mineral regulation , and that the burden should be borne by "agencies and groups that can better shoulder the formidable responsibility of peacemaking in the DRC" (ibid.: 1351).

This jurisdictional mismatch produced not only a capability gap but also a motivation gap. Unlike securities fraud—a direct threat to the SEC's core mandate of investor protection—conflict minerals disclosure carries no financial materiality for U.S. markets and falls outside the SEC's mandate (Woody 2012: 1343). As a result, the SEC had no institutional motivation to prioritize its enforcement, leading to virtually no substantive review of filings over the first decade (GAO 2023: 21). This weak mandate—not merely lack of expertise—explains why the regulation remained substantively hollow.

More critically, the capability gap left the SEC structurally vulnerable to industry arguments. Lacking the expertise to independently evaluate conflict-zone realities, the agency was ill-equipped to challenge industry claims regarding implementation feasibility and costs—a vulnerability that Section 3.3.2 demonstrates became the mechanism through which regulatory dilution was institutionalized.

(2) Institutional Constraints and the Dilemma of Justification

The jurisdictional mismatch identified in Section 3.3.1 left the SEC structurally vulnerable to industry arguments during the rulemaking process. The U.S. rulemaking process operates within an adversarial legal environment where agencies must justify regulations under stringent cost-benefit criteria to avoid being judged "arbitrary and capricious" in judicial review (Woody 2012: 1332-1335). The SEC was acutely aware that any rule imposing substantial costs on industry would face immediate legal challenges from business groups (SEC 2012: 20; Woody 2012: 1332, 1334-1335).

During the rulemaking process, industry stakeholders argued that strict traceability was "unfeasible" due to infrastructure deficits and security challenges in the Great Lakes Region (SEC 2012: 138, 187, 277). Lacking the mandate and expertise in diplomacy and field investigation, the SEC had no means to empirically refute these geopolitical claims advanced by industry (Woody 2012: 1338, 1342, 1350).

As a result, what Chapter 3.2 characterized as "political compromises"—the creation of the "DRC conflict undeterminable" category and the relaxation of the RCOI standard—were

structural imperatives that the SEC was forced to adopt to avoid the risk of having the entire rule struck down due to constitutional issues or inadequate cost-benefit analysis in judicial review (SEC 2012: 194; Woody 2012: 1334-1335). This structural accommodation institutionally embedded the systemic dysfunction documented in Chapter 2: 53% of companies continued to report "undeterminable" origin nearly a decade after implementation (GAO 2023: 15-16) and only 0.7% underwent independent audits (ibid.: 21).

(3) The Structural Implementation Gap: Structural Delegation and the Loss of Incentive

Lacking the jurisdiction to conduct inspections in the DRC, the SEC designed the regulation to rely entirely on external mechanisms, such as private audits and the iTSCi scheme (Diemel & Hilhorst 2018: 458). This effectively delegated the core function of verification to private entities. However, since the SEC has no capacity to oversee these actors, this delegation created a structural "implementation gap" where the regulator cannot verify the very data it mandates.

This structural delegation created perverse incentives. Because the SEC lacked the capacity to monitor ground realities, companies had no incentive to improve actual conditions. Instead, they could avoid legal liability by securing documentation from private schemes like iTSCi and fulfilling formal requirements (Woody 2012: 17, 31; Schwartz 2016: 150, 162-163). As Schwartz (2016: 133, 168) observes, the system came to prioritize "procedural technicalities" rather than "supply-chain transparency."

Yet as detailed in Chapter 2.3, the very institutions on which the regulation depended themselves functioned as laundering mechanisms in the absence of oversight. Global Witness (2022: 16, 22) found that the vast majority of iTSCi-tagged minerals may originate from unvalidated mines. As Diemel & Hilhorst (2018: 458) note, this fundamental disconnect between regulatory requirements and on-the-ground implementation is the structural cause of the systemic dysfunction analyzed in Chapter 2.

These three institutional failures—jurisdictional mismatch (3.3.1), the dilemma of justification (3.3.2), and structural implementation gap (3.3.3)—reinforced one another to institutionally embed the multi-layered dysfunctions observed in Chapter 2 (53% undeterminable, 0.7% audit rate, the certification scheme failure). This was not merely an implementation failure but a structural consequence of delegating a humanitarian mandate to an institutionally inappropriate actor.

Chapter 4. Conclusion

This study has examined why the U.S. Dodd-Frank Act Section 1502, despite its humanitarian intentions, has resulted in what this thesis terms "multi-layered dysfunction" in addressing the conflict minerals problem in the Democratic Republic of the Congo. The

central research question—why was a system embedding such structural defects created in the first place?—has guided an analysis of the regulation's formation process during 2008-2010 through the analytical lens of ideas, interests, and institutions, drawing on Hyde-Price's (2004) framework. The findings reveal that the current dysfunction is not merely an implementation failure but rather the inevitable consequence of structural defects embedded during the policy's design phase.

Chapter 2 documented this multi-layered dysfunction: downstream, corporate due diligence has become a bureaucratic exercise with most companies unable to trace mineral origins and virtually no independent audits; upstream, the regulation has paradoxically enabled mineral laundering, excluded millions of artisanal miners, and escalated violence rather than prevented it.

Chapter 3 traced these outcomes to their origins in the formation process. Simplified "conflict/conflict-free" narratives (ideas) created unworkable standards. Political compromises (interests) produced structural trade-offs that secured legal bindingness while weakening enforcement mechanisms. Delegating humanitarian objectives to the SEC (institutions) created a jurisdictional mismatch and structural implementation gap: the financial regulator lacked conflict zone expertise, became vulnerable to industry feasibility arguments, and was forced to delegate verification to unmonitored private entities.

These three dimensions interacted to produce the current dysfunction: simplified narratives (ideas) created impossible standards; political compromises (interests) hollowed out enforcement; and jurisdictional mismatch (institutions) ensured no agency would monitor humanitarian outcomes. This analysis challenges the implicit assumption in much of the literature that the regulation's failures stem primarily from implementation problems. By examining the formation process, this study demonstrates that the dysfunction was embedded during the design phase itself, meaning implementation improvements alone cannot address structural failures.

However, the regulation did achieve important milestones: it raised international awareness of conflict minerals, prompted the EU regulation (2021), and established supply chain transparency as an industry standard.

This regulatory experience offers three key lessons. First, respect problem complexity: simplified narrative binaries create unworkable standards in complex conflict contexts. Second, ensure jurisdictional fit: assigning humanitarian objectives to agencies lacking relevant expertise undermines effectiveness. Third, integrate compliance with support: corporate due diligence requirements must be coupled with upstream investments in alternative livelihoods and community-level support, along with systematic monitoring to respond to unintended harms.

This study focused on the 2008-2010 formation period and primarily on the DRC. Future research should pursue comparative analysis of regulatory designs and incorporate

more local perspectives, including mining communities, to examine how global regulations interact with local realities.

Bibliography

- Cuvelier, Jeroen, Steven Van Bockstael, Koen Vlassenroot, and Claude Iguma. 2014. "Analyzing the Impact of the Dodd-Frank Act on Congolese Livelihoods." Report prepared for the DRC Affinity Group.
- Diemel, J.A. and Hilhorst, D.J.M. 2018. "Unintended consequences or ambivalent policy objectives? Conflict minerals and mining reform in the DR Congo," *Development Policy Review*, 37(4): 453-469. DOI: 10.1111/dpr.12372.
- Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, § 1502, 124 Stat. 1376 (2010).
- Enough Project. 2009. *A Comprehensive Approach to Congo's Conflict Minerals*. Washington, DC: Enough Project, April 2009.
- Global Witness. 2009. *Faced with a Gun, What Can You Do? War and the Militarisation of Mining in Eastern Congo*. London: Global Witness, July 2009.
- 2022. *The iTSCi laundromat: How a due diligence scheme appears to launder conflict minerals*. Global Witness.
- Government Accountability Office (GAO). 2023. *Conflict minerals: 2022 Company Reports on Mineral Sources Were Similar to Those Filed in Prior Years* (Report No. GAO-23-106295). U.S. Government Accountability Office.
- 2024. *Conflict minerals: Peace and Security in Democratic Republic of the Congo Have Not Improved with SEC Disclosure Rule* (Report No. GAO-25-107018). U.S. Government Accountability Office.
- Hanai, Kazuyo. 2021. "Conflict Minerals Regulation and Mechanism Changes in the DR Congo." *Resources Policy* 74.
- Hanai, Kazuyo. 2022. "Policy Recommendations Concerning Response to Conflict Minerals Regulation." IFI Policy Recommendation No. 11. Tokyo: Institute for Future Initiatives, The University of Tokyo.
- Harline, McKay S. 2015. "Can We Make Them Obey? U.S. Reporting Companies, Their Foreign Suppliers, and the Conflict Minerals Disclosure Requirements of Dodd-Frank." *Northwestern Journal of International Law & Business* 35 (2): 439-482.
- Hyde-Price, Adrian. 2004. "Interests, Institutions and Identities in the Study of European Foreign Policy." In *Rethinking European Union Foreign Policy*, edited by Thomas Christiansen and Ben Tonra: 99-113. Manchester: Manchester University Press.
- Inoguchi, Ayako. 2017. "Jindōteki Hairyo to Kōka wo Ryōritsu shita Torihiki Kisei no Arikata: Afurika Taiko Chiiki no Fūnsō Kōbutsu Kisei wo Jirei ni [Designing a Smart

- Regulation: The Case of Conflict Minerals in the African Great Lakes Region]." Co*Design 2: 17-32.
- Kristof, Nicholas D. 2010. "Death by Gadget in Congo." *The New York Times*, June 27, 2010, Opinion section. Available at: <https://www.nytimes.com/2010/06/27/opinion/27kristof.html#>
- Matthysen, Ken, Thomas Muller, Jan Leysen, and Ntakobajira Zacharie Bulakali. 2023. *Analysis of the Interactive Map of Artisanal Mining Areas in Eastern Democratic Republic of Congo: 2023 Update*. Antwerp: International Peace Information Service (IPIS).
- Moncel, Remi. 2016. Cooperating Alone: The Global Reach of U.S. Regulations on Conflict Minerals. *Berkeley Journal of International Law* 34: 216–244.
- Organization for Economic Co-operation and Development (OECD). 2013. *OECD due diligence guidance for responsible supply chains of minerals from conflict-affected and high-risk areas* (2nd ed.). OECD Publishing.
- Organization for Economic Co-operation and Development (OECD). 2016. *OECD due diligence guidance for responsible supply chains of minerals from conflict-affected and high-risk areas* (3rd ed.). OECD Publishing.
- Parker, Dominic P., and Bryan Vadheim. 2017. "Resource Cursed or Policy Cursed? US Regulation of Conflict Minerals and Violence in the Congo." *Journal of the Association of Environmental and Resource Economists* 4 (1): 1-49.
- Prendergast, John. 2009. "Can You Hear Congo Now? Cell Phones, Conflict Minerals, and the Worst Sexual Violence in the World." Enough Project, April 2009.
- Seay, Laura E. 2012. "What's Wrong with Dodd-Frank 1502? Conflict Minerals, Civilian Livelihoods, and the Unintended Consequences of Western Advocacy." CGD Working Paper 284. Washington, D.C.: Center for Global Development.
- 60 Minutes. 2009. "How Gold Pays for Congo's Deadly War." CBS News, November 25, 2009. Available at: <https://www.cbsnews.com/news/how-gold-pays-for-congos-deadly-war/>
- Stoop, Nik, Marijke Verpoorten, and Peter van der Windt. 2018. "More Legislation, More Violence? The Impact of Dodd-Frank in the DRC." *PLoS ONE* 13 (8): e0201783. <https://doi.org/10.1371/journal.pone.0201783>.
- Schwartz, J. 2016. "The Conflict Minerals Experiment." *Harvard Business Law Review*, Vol. 6: 129–183.
- UN Security Council. 2001. *Report of the Panel of Experts on the Illegal Exploitation of Natural Resources and Other Forms of Wealth of the Democratic Republic of the Congo* (S/2001/357). United Nations.

- U.S. Securities and Exchange Commission. 2012. Conflict Minerals. Final Rule. Release No. 34-67716; File No. S7-40-10; RIN 3235-AK84. 17 CFR Parts 240 and 249b. Adopted August 22, 2012. <https://www.sec.gov/rules/final/2012/34-67716.pdf>
- Vlaskamp, Martijn C. 2019. "The European Union and natural resources that fund armed conflicts: Explaining the EU's policy choice for supply chain due-diligence requirements", *Cooperation and Conflict*: 407–425.
- Woody, Karen. E. 2012. Conflict Minerals Legislation: The SEC's New Role as Diplomatic and Humanitarian Watchdog. *Fordham Law Review*, 81(3): 1315–1351. <https://ir.lawnet.fordham.edu/flr/vol81/iss3/3>