THE EFFECTIVENESS OF THE RWANDAN REACTION TO SECTION 1502 OF THE DODD-FRANK ACT

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Majoro Fabien

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ABSTRACT

Literature has extensively discussed economic sanctions and their effectiveness. However, scholarship on conditions of sanctions effectiveness has mainly focused on vulnerability of the target state as a key determinant for the sanctions effectiveness on which the sender bases his calculation when levying economic sanctions. The overall objective of economic sanctions is to induce political behavior change in the target state by inflicting economic pain. The emphasis on economic vulnerability of the target could explain why economic sanctions have generally failed. This study draws attention to another factor for economic sanctions' effectiveness namely the pre-existence of domestic policy environment in the target state that can easily accommodate the demand of the sender. More specifically, this study focuses on the situation that prevailed in Rwanda before the US imposed the conflict minerals provision, an economic sanction targeting four minerals from central African States producing tin, tantalum, tungsten and gold. The central argument of this study is that, in addition to vulnerability and other determinants of sanctions' effectiveness, a target state would be more likely to comply with economic sanctions and implement actions leading to sanctions' effectiveness if it had, prior to sanctions, a policy environment that is favorable to the implementation. The analysis of the case of Rwanda vis-à-vis section 1502 of Dodd-Frank act – the conflict minerals provision – shows that Rwanda complied with the conflict minerals requirement because prior to the issuance of the conflict minerals sanction, it had already embarked on mining policy reforms to increase transparence within the sector, and these reforms were in line with conflict minerals provision requirement. Whereas reforms were

lagging behind due to various reasons, the threat of the conflict minerals provision and its effects after the adoption created pressure to private operators and constituted a propitious moment for policy makers and implementers to revive overlooked reforms as a quick-win solution to mitigate effects of section 1502 of Dodd-Frank Act. Instead of resisting the sanction as it is generally expected in similar cases, Rwanda chose to fast-track the stalled mining sector reforms to implement the demand of the US formulated in the conflict minerals provision. This was easily made because Rwanda's compliance to the conflict minerals provision had no additional political cost.

DEDICATION

To you dad who departed us so early,

To you mum who constantly pray for me,

To my family that supported me in this research,

This thesis is so affectionately dedicated.

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LIST OF ABBREVIATIONS AND ACRONYMS

155 REC S. 4687:	Congressional Record, Senate, Volume 155, page 4687
3TG:	Tin, Tantalum, Tungsten and Gold
ADF-NALU:	Allied Democratic Forces - National Alliance for Liberation of Uganda
AFDL:	Alliance of Democratic Forces for the Liberation of Congo
AFP:	Analytical Fingerprint
AGI:	Africa Governance Initiative
BBC:	British Broadcasting Corporation
BGR:	Germany Federal Institute for Geosciences and Natural Resources
BSR:	Business for Social Responsibility
Cab. Res:	Cabinet Resolutions
CCCMC:	Chinese Chamber of Commerce of Metals, Minerals and Chemicals Importers and Exporters
CFSI:	Conflict Free Smelter Initiative
CIA:	Central Intelligence Agency
CNDP:	National Congress for the Defense of the People
COPIMAR:	Cooperative for the Promotion of Artisanal Mining Industry in Rwanda
COREM:	Ruanda-Urundi Minerals Research and Exploitation Company
CRG:	Congo Research Group
CTC:	Certified Trading Chain
D- WA:	Democrat representing the State of Washington

DDRRR:	Disarmament, Demobilization, Repatriation, Reintegration and Resettlement
DRC:	Democratic Republic of Congo
EDPRS:	Economic Development and Poverty Reduction Strategy
EICC:	Electronic Industry Citizenship Coalition
EITI:	Extractive Industry Transparency Initiative
FDLR:	Democratic Forces for the Liberation of Rwanda
Fed:	Federal
FRW:	Rwandan Franc
GAO:	Government Accountability Office
GATT:	General Agreement on Tariffs and Trade
GDP:	Gross Domestic Product
GEOMINE:	Geology and Mine Company
GEORWANDA:	Rwanda Geology and Mine Company
GeSI:	Global e-Sustainability Initiative
GMD:	Geology and Mine Department
GPO:	Government Printing Office
H.R. 4174:	Text of the House of Representative Version 4174
HP:	Hewlett Packard
IBP:	International Business Publications
ICG:	International Crisis Group
ICGLR:	International Conference of the Great Lakes Region
ICJ:	International Court of Justice

IPSAs:	International Public Sector Accounting Standards
ISI:	Import Substitution Industries
ITRI:	International Tin Research Institute
iTSCi:	ITRI Supply Chain Initiative
JDC:	Joint Delivery Committee
KAMICO:	Kamushehe Mining Cooperative
kg:	kilogram
LCD:	Liquid Crystal Display
M23:	Movement of 23rd March
MICORUDI:	Mining Consortium for Ruanda-Urundi
MINAFFET:	Ministry of Foreign Affairs and Cooperation
MINECOFIN:	Ministry of Economic Planning and Finance
MINETAIN:	Ruanda-Urundi Tin Company
MINICOM:	Ministry of Trade and Industry
MINIFOM:	Ministry of Forests and Mining
MINIMART:	Ministry of Mining and Craft
MINIRENA:	Ministry of Natural Resources
MONUC:	United Nations Organization Mission in Democratic Republic of Congo
MONUSCO:	United Nations Organizations Stabilization Mission in the Democratic Republic of Congo
MRMS:	Mineral Rights Management System
MSF:	Médecins Sans Frontières/Doctors without Borders

MT:	metric ton
NAM:	National Association of Manufactures
NARA:	National Archives and Records Administration
NBM:	New Bugarama Mining Company
NCBS:	National Capacity Building Secretariat
NGO:	Non-Governmental Organization
ODA:	Official Development Assistance
OECD:	Organization for Economic Cooperation and Development
OGMR:	Rwanda Office of Geology and Mines
OPS:	White House Office of the Press Secretary
p.:	page
par.:	paragraph
RCD:	Rally for Congolese Democracy
RCD-ML:	Rally for Congolese Democracy-Liberation Movement
RCM:	Regional Certification Mechanism
REDEMI;	Rwandan Mining Authority
RIEPA:	Rwanda Investment and Export Promotion Authority
RINR:	Regional Initiative against Illegal Exploitation of Natural Resources
RPF/RPA:	Rwandese Patriotic Front/Rwandese Patriotic Army
SAIIA:	South African Institute for International Affairs
SCBI:	Strategic Capacity Building Initiative
SDR:	Special Drawing Right
sec.:	Section

SEC:	Securities and Exchange Commission
SOE:	State-Owned Enterprises
SOMIGL:	Great Lakes Mining Company
SOMIKA:	Kanama Mining Company
SOMINKI:	Kivu Mining and Industrial Company
SOMUKI:	Muhinga and Kigali Mining Company
t:	ton
TINCO:	Tin Company
UK:	United Kingdom
UN:	United Nations
UNDP:	United Nations Development Program
UNECA:	United Nations Economic Commission for Africa
UNGoE:	United Nations Group of Experts on Democratic Republic of Congo
UNHCR:	United Nations High Commission for Refugees
UNSC:	United Nations Security Council
US$:	United States Dollar
US:	United States
USAID:	United States Agency for International Development
USCA:	United States Courts of Appeal
USGS:	United States Geological Survey
USSR:	Union of Soviet Socialist Republics

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CHAPTER I: INTRODUCTION

In an attempt to find a solution to humanitarian crisis in eastern Democratic Republic of Congo (DRC), the US Congress voted a law that restricts trade of four minerals namely tin, tantalum, tungsten and gold from DRC and its surrounding countries with the hope of dismantling the source of finance of armed groups that cause humanitarian crisis in eastern DRC. This law known as the "conflict minerals provision" has been identified by scholars as an economic sanction to Central African countries that produce the four designated minerals (Owen, 2013; Parker, Foltz, & Elsea, 2016). This law creates a conflict minerals zone that covers DRC and 9 countries that share an official border with it namely Angola, Burundi, Central African Republic, Republic of Congo, Rwanda, South Sudan, Tanzania, Uganda and Zambia.

Depending on various factors such as the availability and the share in total export of the four targeted minerals, the size and the structure of the economy and the distance from the eastern DRC where armed conflicts occur, countries in the conflict minerals zone are affected differently. In this regard, DRC the theater of armed conflict and violence, and Rwanda, the two main regional producers of the tin, tantalum and tungsten are mostly affected. Regarding DRC, only its eastern provinces of North and South Kivu are affected but its economy as a whole is not because the targeted minerals are neither the main commodities exported by DRC nor the main minerals[1]. This leaves Rwanda as

[1] DRC was described as a geological scandal due to the extraordinary concentration of minerals by Van Reybrouck (2014) in his book "Congo: The Epic History of a People". It has almost all the main minerals needed in modern industries. More than 100 types of minerals and gems are currently mined in the Democratic Republic of the Congo (Ministry of Mining, n.d.), but the main minerals are cobalt, copper, diamond, gold, lead, zinc, tantalum, manganese and tin. In 2013, DRC share of the global cobalt production amounted to 48%; tantalum to 17%; diamond to 12%; copper to 5%; while refined cobalt reached 4%. DRC accounted for 47% of the world's cobalt reserves (Yager, 2016). Congo also produces energy such as coal, uranium and oil that play an important role in the domestic economy.

the most concerned country as it has significant dependence on the targeted minerals[2]. Therefore, whereas other concerned countries just ignored the US law in their daily mining business, and DRC followed suit of conflict minerals provision by decreeing a mining ban, Rwanda was expected to take an unequivocal position as the most affected country in order to save this important sector.

Versus economic sanctions, countries either comply or resist. The sanctions literature shows that in most cases, countries tend to resist sanctions, which leads to sanctions failure. In the case of Rwanda vis-à-vis the conflict minerals provision, it chose to comply with the conflict minerals provision. What is the plausible explanation to this Rwandan compliance despite literature predicting otherwise? My theoretical suggestion is that a target country is likely to comply with the demand of the sender country of economic sanctions when the former has pre-existing policy setting that can accommodate the demand of the latter. In this study, I argue that reforms that were going on prior to the adoption of Dodd-Frank convinced Rwanda to comply with the Dodd-Frank requirement as they were in line with the objective of these reforms. This study also suggests that Rwanda's policy actions implemented in the aftermath of the adoption of the conflict minerals provision were effective in the sense that they not only brought back the trust of buyers of Rwandan minerals but also helped in strengthening the mining sector and increasing production and mineral revenues.

1.1 Context

The momentum and benefits of mining sector reforms that have started with liberalization of mining sector in 2006 in Rwanda were threatened by the effects of

[2] Export of minerals contribute up to 30% of total Rwandan exports and tin, tantalum and tungsten constitute more than 99% of Rwandan exported minerals. Mining is the second foreign exchange earner behind tourism (see details in chapter 5).

section 1502 of the Dodd-Frank Act, a US law that labeled tin, tantalum and tungsten (3T), the main mineral ores exported by Rwanda as conflict minerals. It has been documented that income from transnational trade of these minerals is used by armed groups in eastern DRC to perpetuate conflict and violence (Koning, 2011; Schush & Strohmer, 2012). This US law imposed a cumbersome and onerous process to target countries to prove to the market that the 3TG they are trading are not in any way connected or contributing to armed conflicts and violence in the Democratic Republic of Congo (DRC) or any other country in the region. As the three minerals – tin, tantalum and tungsten (3Ts) – constitute more than 99% of Rwandan traded minerals and that mining sector is the second foreign exchange earner for Rwanda contributing 30% of Rwandan export earnings (English, Mcsharry, & Ggombe, 2016), including Rwandan minerals in the spectrum of Section 1502 not only threatened the entire mining sector but also the entire Rwandan economy.

Though the conflict minerals provision threatened the mining sector, reforms that Rwanda had undertaken since 2006 revealed to be critical in helping Rwanda to positively respond to the requirement of this conflict minerals. Mining sector reforms aimed at streamlining Rwandan minerals on the one hand, and fight against smuggling of minerals from neighboring countries that distracted Rwandan registered mining companies from investing in their mine concessions on the other.

In response to the threat posed by this conflict minerals provision, Rwanda enhanced transparency in mining by subscribing to international certification schemes that help in tracing the origin of minerals, streamlining the administration, management and regulation of the mining sector as well as enhancing border controls to curb smuggling of foreign untagged minerals into Rwanda. In a nutshell, Rwanda showed to

the international community in general and the US in particular the political will to disassociate itself with illicit trade of DRC minerals.

The quick positive response of Rwanda vis-a-vis the international pressure caused by economic sanctions is unusual when one takes into consideration that economic sanctions have a high failure rate (Boomen, 2014; Morgan & Bapat, 2003). In the past, similar laws have been adopted but yielded in low or no compliance and one would wonder why Rwanda in this particular case opted to comply. In addition to complying with the conflict minerals provision requirement, Rwanda put in place other strategies to develop domestic mining sector not only to offset lost income occasioned conflict minerals provision and its compliance but also to sustainably grow the sector in order to for it keep supporting national economic growth. This study reviews the motivations that drove Rwanda's choice to comply and the effectiveness of the measures taken by Rwanda[3].

Before embarking on details of Rwandan policy actions to comply with the conflict minerals provision, this study examines why Rwanda was particularly targeted by the conflict minerals provision. The conflict minerals provision was created by section 1502 of Dodd-Frank Act as the contribution of the US in solving the endemic humanitarian crisis caused by wars and violence in the Democratic Republic of Congo. These wars became chronic due to ease of warlords to finance their war operations with revenues from illicit trade of the abundant mineral resources and the facilitation they received from DRC neighboring countries' individuals and institutions in their illicit trade. DRC has been a theater of wars and rebellions since colonial times but the worst violent

[3] In this study, effectiveness is the extent at which Rwandan policy actions to reverse the effects of Dodd-Frank Act and keep supporting Rwandan economic growth have managed to achieve their intended goal.

wars that triggered section 1502 of Dodd-Frank happened since 1996 and their consequences are still felt to date.

Since its independence, Congo Kinshasa/Zaire has been affected by different civil wars, secession war and different violence and riots (Carpenter & Conrad, 2012; Gibbs, 1996; Guenther, 2008; Saideman, 1997; UNECA, 2015). However, President Mobutu managed to impose relative peace in Zaire/current DRC even though his style of governance and management of public resources is said to be the root cause of grievances that triggered current wars (UNECA, 2015). The recent wars and violence in eastern provinces of North and South Kivu have been there for more than 20 years beginning with Congo War I that chased President Mobutu from power to today's multitude of armed groups passing through the Congo War II or African world war. All these wars and ensuing violence have resulted in a death toll of more than 5 million people (N. Cook, 2012).

The Congo War I started in 1996 when Rwanda and its friends attacked Zaire (current DRC) to forcibly repatriate more than one million Rwandan refugees and destroy military camps of former Rwandan armed forces that were defeated in 1994 (UNECA, 2015; Williams, 2013 see also Larmer, Laudati, & Clark, 2013; Mushi, 2013). Rwanda accused Zaire and the international community to fail to establish refugee camps far from the Rwandan border and to fail separating civilians from armed forces that were coming back to cause insecurity in Rwanda (Arimatsu & Mistry, 2012; Williams, 2013). When Rwandan refugees went to Zaire, they exported their ethnic problems to eastern DRC where Congolese Tutsi were harassed, killed and chased from their property (Ubuntu Initiative for Peace and Development, 2012; UNECA, 2015; Williams, 2013). Majority of them took refuge in neighboring countries. Rwanda and Uganda attacked Zaire to get

rid of insecurity on Rwandan border, to repatriate Rwandan refugees and to rescue Congolese of Rwandan origin that were constantly harassed by Zairean forces and some elements from Rwandan refugee camps. Later Rwanda and Uganda supported the creation of AFDL, a rebel movement that legitimized the general attack against Zaire government forces, the attack that managed to chase president Mobutu from power in 1997 and installed Laurent Desire Kabila, the spokesperson of AFDL, as the new president of Zaire that he renamed the Democratic Republic of Congo (Williams, 2013).

One year later, president Kabila disagreed with Rwanda and Uganda who put him on power and started harassing Rwandans in DRC army and civil service and other Kinyarwanda speaking Congolese (Arimatsu & Mistry, 2012; Williams, 2013). Rwanda, Uganda, Burundi and the newly created Congolese Rally for Democracy rebel movement (RCD) , started a new war against Kabila's regime and occupied the eastern provinces of DRC (Arimatsu & Mistry, 2012). Other rebel movements such as Congolese Liberation Movement took advantage of weakness of DRC government to occupy the northern part of DRC (ICG, 2000a). By the end of 1999, half of DRC territory was occupied either by rebel movement or foreign forces (Reyntjens, 2009). Friendly countries to Kabila namely Zimbabwe, Namibia, Angola and others sent troops to stop the advance of enemy forces (Arimatsu & Mistry, 2012; Fahey, 2011; Taylor, 2015; Williams, 2013). The war was named the great Congo war or the World War of Africa. Rwanda and its allies occupied the eastern part of DRC until the Sun City agreement that concluded the withdrawal of foreign forces and the creation of the Transition Government in Kinshasa where different local warring parties participated in that government (Arimatsu & Mistry, 2012; Larmer et al., 2013). As the eastern part of DRC is rich in different minerals and other natural

resources, Rwanda and other occupying powers were accused to have illegally exploited these Congolese resources (UNGoE, 2002).

The exploitation of minerals in Congo allegedly started with the great Congo war where different warring parties financed their war operations with revenues from minerals gotten in their occupied territory (UNGoE, 2001). Coincidently, this period corresponded with the boom of tantalum trade on the international market due to its use in hi-tech gadgets such as mobile phones, touch screen devices and others that needed this mineral for miniaturization (BSR, 2010). As the market was hungry of these minerals and some major producing countries such as Australia, Brazil and Canada that used to be the leading producers of some needed minerals such as tantalum (Harmon et al., 2011; Mantz, 2008) were scaling down their production due to various reasons, cheap minerals from the African Great Lakes became popular (Bleischwitz, Dittrich, & Pierdicca, 2012).

After Sun City Agreement, foreign forces were requested to repatriate in their respective countries but due to Rwandan proximity with eastern DRC, it is alleged that Rwanda kept its influence in that area. Moreover, the withdrawal of foreign forces left a big gap as DRC is vast and the government was weak, thus many local former collaborators of belligerents , who had experience in military operations and mineral trade business, turned themselves into warlords and created armed groups that either were against or pro Kinshasa government and continued the lucrative business of minerals trade (Larmer et al., 2013; Stearns, 2012). All these armed groups perpetuated the illicit trade of natural resources abetted by individuals or companies from neighboring countries (Maystadt, De Luca, Sekeris, & Ulimwengu, 2014). The multiplication of armed groups and militia following profits from natural resources pillaging worsened the humanitarian

situation which led the international community to start getting involved in finding a solution (Arimatsu & Mistry, 2012; Larmer et al., 2013; Maystadt et al., 2014).

Responding to the ensuing humanitarian crisis, different initiatives were taken. At the beginning to facilitate the agreement between warring parties and enhance governance in DRC and later, when these initiatives failed to stop violence, illicit trade of resources from the region were targeted as source of financing of warring parties. To begin with, the UN reacted in its classic way of sending peace keeping mission in 2001 to observe the cease fire agreement and put in place a team in charge of investigating violations of international law and overseeing the application of embargo against some individuals and companies that were identified as collaborators of warlords in illicit trade of Congo natural resources. However, these UN efforts did not yield in positive results.

Likewise, different US initiatives to end Congo wars did not dissuade those who were benefiting from the illicit trade to keep collaborating with deadly warlords. In 2006, the US Congress adopted a law, promoted by the then Senator Barak Obama (N. Cook, 2012; Sutherland, 2011) to support peace building in DRC and to sanction peace spoilers (GPO, 2007). There were other bilateral and multilateral initiatives by European countries and the African Union to support the restoration of peace in DRC to no avail.

Congo wars and violence have attracted a number of scholars who attributed its root causes and recurrence to different theories. One group of scholars argues that the incessant war and violence in eastern Congo are a resultant of a long period of bad governance and mismanagement of public resources (see for example Autesserre, 2012). In other words, this group explains that those who took up arms against DRC government were motivated by grievances in terms of denial of fundamental rights and freedoms, oppression and exclusion from benefiting from public goods and resources, and that in

the course of their war they use natural resources as means to achieve their objective. The second group, without denying the contribution of bad governance in Congo, argues that the recurrent insecurity and violence in eastern DRC is primarily motivated by the greed of warlords and other belligerents to take advantage of the abundant natural resources in the region (Maystadt et al., 2014; Montague, 2002; Olsson & Fors, 2004; UNECA, 2015). According to this group of scholars, the ultimate goal of waging war is not to change the political system in DRC or in regions where they operate but to control as many resources as possible and their trade routes. Armed groups wage wars to conquer areas full of resources from other groups or government forces or to protect those already in their grip. It is this second understanding of greed as the main source of war and violence in DRC that received recent attention of policy makers at international level and support from humanitarian NGOs, human rights activists and lobby groups.

After realizing that initiative aimed at enhancing governance in DRC as a means to end hostilities in eastern DRC were ineffective, a group of NGOs steered by Enough Project and Global Witness started an awareness campaign built on the theory of greed as the motivation of armed conflict that by buying consumer products manufacture with DRC sourced minerals, consumers in the West and other parts of the world were supporting armed groups that illicitly trade them at the expense of violations of human rights and humanitarian law in Congo. They proposed that the international community devises ways of breaking up financial capacities of armed groups and militias such as excluding from international market some natural resources they believed they are used by armed groups in eastern DRC to finance their war operations. Their assumption was that by cutting off the source of finance of armed groups, they would accept to join programs of demobilization and reintegration into civilian life (Prendergast, 2009). The

campaign launched in 2007 targeted four minerals and their derivatives available in eastern Congo namely cassiterite that produces tin, Colombo-tantalite that produced tantalum, wolfram that produces tungsten, and gold. This campaign was successful in the sense that it managed to mediatize DRC humanitarian situation and to attract support of civil liberties and lobby groups in the US and finally they managed to convince some congressmen to initiate a law that penalizes companies that source their minerals from the region (Woody, 2012). Different bills were initiated and at the end, they were merged into one text that formed section 1502 of the Dodd-Frank (Whitney, 2015).

Section 1502 of Dodd-Frank Wall Street and Consumer Protection Act created what is known as "conflict minerals" provision, a de facto economic sanction against Central African countries producing the minerals labelled conflictual. This legal provision requires on the one hand all companies listed on US stock market that use the four above-mentioned minerals in their final products to refrain from sourcing in the demarcated conflict mineral zone unless they are sure that the minerals purchased are not in any way connected to conflict in that region. The provision further requires companies to report to the Securities and Exchange Commission (SEC) whether or not they used components manufactured in minerals sourced from conflict mineral zone, i.e. DRC and its neighboring countries, and inform consumers of their products that the products they are selling contributed or not to finance war and violence in Congo. This is equivalent to tell the consumers not to buy these products otherwise they would be accomplices in fueling humanitarian catastrophe in DRC. This reporting requirement, along with different other requirements such as conducting due diligence in the entire supply chain, made companies shy away from sourcing in the designated conflict zone, and this at the beginning had serious repercussions on producing countries. On the other hand, the

conflict minerals provision requires the State Department and USAID to ensure that producing countries in Central Africa region comply with rules of good governance and transparency in their mining operations management.

These requirements seemed simple and straight forward but after analysis by different specialists, they revealed to be very complex as they have different ramifications and as the SEC's final rule and GAO reports detailed it, a number of processes and procedures that carry a heavy cost need to be put in place not only by companies but also by producing countries. This is the reason why scholars who have analyzed the nature of this legal provision concluded that it is an economic sanction (Owen, 2013; Parker et al., 2016). Section 1502 of the Dodd-Frank was interpreted by different interested observers and scholars as a foreign policy tool that creates extraterritorial obligations to foreign states to behave in a certain manner by imposing the economic cost to this effect (Kluwer, 2015; Taiwan Semiconductor Manufacturing Company Ltd, 2006; Woody, 2012). In this regard, section 1502 satisfies the definition of economic sanction. Among the countries most affected by the conflict minerals provision were DRC and Rwanda as the main regional producers of three among the four criminalized minerals. Taking into account the history of Rwanda in Congo wars and the knowledge the US administration has about it and the vulnerabilities of Rwanda related to minerals trade, it is plausible to say section 1502 is an economic sanction against Rwanda and the practice suggests that Rwanda takes it as such (Financial Services sub-committee, 2015).

1.2 Statement of the problem

The economic sanction theory has focused on vulnerability of the target states to explain compliance to and effectiveness of economic sanctions. The presence of vulnerability as a key determinant of sanctions effectiveness in most of cases of issued

economic sanctions, literature has identified generalized failure of sanctions to coerce leaders in target countries to mend their reprehensible policies and/or behavior. In the Rwandan case, sanctions lead compliance and change of behavior and this challenges the general theory. This study attempts to give a plausible explanation to this behavior that challenges the general theory.

Existing literature has laid down conditions under which economic sanctions presumably work. Different scholars, using different research methods (see for example Allen 2005, 2008; Bapat, Heinrich, Kobayashi, & Morgan, 2013; Jaleh Dashti-Gibson, Patricia Davis and Radcliff, 1997; Bolks and Al-Sowayel, 2000) have studied factors of sanctions compliance and effectiveness. Most of these factors can be grouped under the category of vulnerability. Though they found that some factors are more important than others, they all agree that the rate of sanctions effectiveness is very low. Outside economic vulnerability, Allen (2008) added another factor related to institutional constraints. She argues that autocratic leaders are less constrained thus able to easily resist economic sanctions because no internal voice opposes their choice. She had earlier argued that domestically political concerns constitute the most important factor that explains success and failure of economic sanctions (Allen, 2005). Allen argument can be summarized as political vulnerability. Following the argument of Allen (2005), Rwandan falls under the category of authoritarian state as identified by 2007 the Economic Intelligence Unit report[4], and this would had rather predict resistance rather than compliance. Regardless of factors literature found most appropriate in exerting pressure to the target country, it

[4] According to the 2016 Economic Intelligence Unit's Democracy index available at https://infographics.economist.com/2017/DemocracyIndex/, Rwanda scored 3.07 on the scale of 10 and is classified among the authoritarian regimes. Thus the argument that internal forces with different opinion lead the target country to comply with economic sanctions to avoid their perverse effects on the population is not applicable to Rwanda.

concludes that success of economic sanctions is less than 20 percent in the optimistic scenario whereas failure rate reaches 98% in multilateral sanctions (Boomen, 2014). This leaves unanswered the question why Rwanda, when faced with Dodd-Frank's Section 1502, opted to comply with the requirement while all odds such as EIU (2017) predicted Rwandan resistance to the conflict minerals provision.

Immediately after the section 1502 of Dodd-Frank Act that created the conflict minerals provision was promulgated, Rwanda promptly initiated actions that would keep Rwandan mining functioning unlike DRC, the government that decreed the mining ban of the four minerals in the eastern provinces and caused more than 2 million artisanal minerals to lose their source of income (Geenen, 2012; Parker & Vadheim, 2013). This ban also affected Rwanda based companies that were buying cheap Congo minerals but it constituted a good opportunity for Rwanda to rally back companies thereto registered to focus on their concessions.

Rwanda took advantage of this Congo government imposed ban to revive its mining sector that had been overlooked due to cross border minerals trade. With the news about the adoption of the conflict minerals provision, Rwandan mining and minerals exporting companies panicked and were concerned not only with the market of their stock but also for their future as the buyers had started boycotting minerals from the region and had given the final date of April 1st, 2011 for Rwanda to have started certification of the origin of its minerals or face the total boycott (R. Cook, Mitchell, & Levin, 2014). Rwanda hastily rolled out on all its mine sites the minerals certification mechanism that was voluntary and implemented in pilot phase since 2008. This policy choice brought extra costs that ate in the profit margin of mining companies in addition to some buyers that stopped sourcing from the region. As result, some miners lost their jobs, but also

those who managed to retain them had their wages reduced by more than a half to cope with the international market reaction towards minerals from the region and buyers speculations that followed the announcement of the adoption of conflict minerals provision[5]. Beyond social economic effects, conflict minerals provision negatively publicized mining activities in DRC and its neighboring countries. In the campaign against conflict minerals, Rwanda was always finger-pointed as the supporter of armed groups that commit humanitarian violations, as a looter of DRC minerals and as the route of DRC black market minerals or the laundering place of eastern DRC minerals (see for example Autesserre, 2012; Dranginis, 2015; Samset, 2002). These accusations created a bad reputation for Rwanda and its minerals exports were suspected to be fraudulently taken from DRC (Arimatsu & Mistry, 2012; Samset, 2002). Therefore, there was a need for Rwandan officials to dissipate doubt about Rwandan origin and differentiate them from those originating in DRC, but also for a diplomatic front to clear up Rwandan image especially among buyers in the West who do not have firsthand information from the ground (Arimatsu & Mistry, 2012).

To be able to react on these effects generated by the conflict minerals provision, Rwanda needed to clearly understand the requirement of section 1502 of the Dodd-Frank that instituted conflict minerals is imposing. The good understanding of this law and its effects helped Rwanda to reinforce the existing policies and take other adequate policy actions that addressed not only the effects but also responded to the expectations of the

[5] The interview with Frank Gatera, the Secretary General of the Mining and Mineral Exporting Companies Association based in Kigali, Rwanda, different companies involved in mining and mineral processing and exporting operations had to retrench some staff to cope up with the situation of the Dodd-Frank Act effects and low mineral prices on international market price. The reduction of the price was confirmed by artisanal miners I found in Gifurwe and New Bugarama wolfram concessions with whom I had discussions on March 2nd and 3rd 2016.

issuer as well as developed the mining into a robust and resilient sector that contributes to the national economic growth. Rwanda clearly understood that section 1502 of Dodd-Frank is a US tool to force Rwanda to come clean in regards to aiding and abetting armed groups in eastern DRC that uses conflict minerals as their source of income and to stop being a route or a laundering place of conflict minerals from eastern DRC as alleged by NGOs and other researchers on Congo (Congo Research Group, 2011). In this understanding, US regulated companies are targeted at the same time with producing countries to increase effectiveness of the sanction measures and to circumvent failures experienced in the past with Diamond and other conflict resources when sanctions concerned only states and their trade partners (Samset, 2002). The postulates of this understanding is that Rwanda has option between complying with the conflict minerals provision's requirements or resist them.

The actions of Rwanda in reaction in the face of the conflict minerals provision is then evaluated in the context of compliance. As a matter of fact, the annual reports to the US congress by the State Department evaluate the effectiveness of the implementation by Rwanda and other concerned countries (see for example GAO, 2015a), which confirms that the US government expects countries that were included in the conflict minerals zone to implement certain actions in compliance with conflict requirements. The question that ensues is to know if what Rwanda did in compliance with conflict minerals provision requirement is effective or not and what it can do to improve this effectiveness or to meet the expectations of the issuer of the conflict minerals provision.

1.3 Purpose of the study

As mentioned above, literature on economic sanctions has focused on vulnerability factors to explore the effectiveness of sanctions. Economic sanctions

literature has not yet analyzed the role pre-existing domestic policies of target countries play in the effectiveness of economic sanctions. In countries that cannot be ranked as democracies such as Rwanda[6] thus likely to resist sanctions, it is important to understand how prior policies interplay in the decision making of the target states to comply with sanctions.

The purpose of this research is to use the economic sanctions literature to investigate underpinning factors that explain Rwanda's compliance to the conflict minerals provision in the contrary of what the theory predicted. This study reviews the situation that prevailed before the conflict minerals provision was adopted and different policy actions undertaken by Rwanda when it was threatened by effects of Dodd-Frank. It further analyzes Rwandan policy actions' effectiveness in mitigating these effects. In order to achieve this purpose, the study discusses details of section 1502 of Dodd-Frank Act (conflict minerals provision) in light of the economic sanctions theory and the situation that called its adoption. In return, the economic sanctions theory is used to understand the suitability of Rwandan policy choices vis-à-vis the US expectations towards Rwanda in adopting Dodd-Frank Act.

1.4 Research question

The hypothesis of this this study is guided by the central question of understanding what was the basis of Rwanda swift compliance in the aftermath of the conflict minerals provision and what is the impact of Rwandan choice on its mining sector after the adoption of section 1502 of Dodd-Frank Act. This central question calls for the following auxiliary questions:

[6]Supra note 4.

- What does economic sanctions literature suggest on sanctions effectiveness and how is it applicable in the case of Rwanda vis-à-vis the conflict minerals provision? This question is answered in chapter 2 on economic sanctions and in chapter 5 and six on Rwandan mining details.
- What does Section 1502 of Dodd-Frank Act requires Rwanda and how does it affect Rwanda? The answer to this question calls for the context of Section 1502 adoption, its background, effects and its nature.
- How was Rwandan mining before Dodd-Frank and what policy reforms were undertaken? To answer this question, the history of Rwandan mining is reviewed, its characteristics and vulnerabilities as well as different reform initiatives undertaken by Rwanda before Dodd-Frank and what novel policy actions were undertaken to face up Dodd-Frank effects.
- Why Rwanda opted to comply with the conflict minerals provision requirement and how did the ongoing reforms help Rwanda in its compliance endeavors? The answer to this question encompasses the main finding of this research that Rwanda chose to comply with Dodd-Frank act requirements because the domestic policy environment and ongoing mining sector reforms allowed compliance without occasioning a heavy political cost.

1.5 Research methodology

Section 1502 creates the conflict mineral zone of 10 countries in the African great lakes region. This study cannot cover them all due to limited time and resources. It only focuses on Rwanda. Rwanda was chosen as the main area of focus because of various reasons: Rwanda is the main country cited in current eastern DRC war and in all papers and document related to the illicit exploitation and trade of Congo minerals. Secondly,

Rwanda has the same geographic and geological feature with eastern DRC, thus it is likely to have more or less the same mineral deposits. Thirdly, Rwanda is currently the main exporter of tantalum where its world share is around 50% of the world needed tantalum (USGS, 2013b). Fourthly, Rwandan economy is not so diversified and highly depends on export of the three minerals targeted by section 1502 of Dodd-Frank Act. Besides, Rwanda has been in the past accused of directly plundering DRC minerals, facilitating some armed groups operating in Congo to trade the illegally acquired minerals or not monitoring its borders to curb black market cross-border trade that benefited armed groups violating human rights and humanitarian law in eastern DRC. All these reasons makes Rwanda a good case study on conflict minerals provision implementation and effectiveness.

As the issue of conflict minerals is novel and is still ongoing this study analyzes the conflict minerals provision from its adoption in July 2010 until the end of 2016. Only, pressing facts that occurred later than this date could be used as information to the reader to understand to where the issue is trending to.

In this study, different research methods are used to collect and analyze data and process items of information related to this research. In order to collect useful data and information to answer my research questions, different scholarly works, government reports, specialized agencies reports, fact sheets and other documents were reviewed in order to understand the rationale, the scope, the effects and different discussions about natural resources conflict in general and conflict minerals in particular. Government reports consulted were from Rwanda and from the US government and congress. Interviews with policy makers and officials in charge of handling minerals in Rwanda were conducted to get the first hand opinion on mineral conflict rule effects and the policy

responses by Rwanda. Among people interviewed were the Minister of State in Charge of Mining in the Ministry of natural resources, the Deputy Director General of Rwanda Natural Resources Authority in charge of Mining, the Chairman of Rwandan Mining Association, the Secretary General of Rwanda Mining Association and the 3 heads of operation in the visited concessions as well as a meeting with senior staff of Gifurwe Wolfram Mines and New Bugarama Mining. Six mining concessions were visited to discuss with technicians on their daily activities to trace if effects of the conflict minerals provision are felt at that level and to carry out an overt observation of how some policy reactions are being implemented at the mining site. In these places, mine sites carrying out semi-mechanized mining operations and those run by artisanal miners were visited to discuss with works understand their stake on Dodd-Frank Act's section 1502. As well, the tagging and bagging process that ensures traceability of minerals was observed.

I also had discussions online with Toby Whitney, an Affiliate Professor at the University of Washington's Henry M. Jackson School of International Affairs who was a Fellow for the US Congress House of Representatives' Ways and Means Committee and was Legislative Director for Congressman Jim McDermott (D-WA) during the drafting and debates of bills that preceded section 1502 of the Dodd-Frank and the inclusion of this section in Dodd-Frank Act, and personally worked on Section 1502 on conflict minerals in the Dodd-Frank Act. His observations helped to have some insights of what happened in the congress and their expectations towards the conflict minerals provision.

This research being a qualitative one, and the researcher being a Rwandan national who worked for government and worked on some policy actions to mitigate effects of section 1502 in the aftermath of its adoption, it is susceptible to some bias. Thus the researcher exercises extra caution to reduce bias. However, sometimes, the personal

opinion of the researcher is expressed in the analysis but it is hoped that it does not compromise the credibility of the research and its conclusions.

1.6 Research findings

The main finding of this study is twofold. Firstly, since 2006, Rwanda embarked on mining sector reforms that were the last stage of the liberalization process recommended by international development partners. It was also in the framework of implementing the regional treaty on peace and stability that requested regional countries to fight against illicit exploitation of natural resources that was identified as one factor perpetuating armed conflicts. However the implementation of these reforms was resisted by private operators due to interests of private operators who run a more profitable cross-border mineral trade with eastern Congo. The second finding is that the existence of these off-track reforms constituted a foundation on which Rwanda built its compliance with section 1502 of Dodd-Frank act. The availability of reforms that have been agreed on by all stakeholders constituted an encouragement factor for Rwanda to comply with the requirement of Section 1502 of Dodd-Frank. Rwanda decided to comply with the requirement of Section 1502 of Dodd-Frank Act because ongoing mining sector reforms were in line with the requirement thus, with the pressure of the conflict minerals provision, it became easy to bring private mining companies back to their concession[7] and subscribe

[7] After the liberalization of mining sector, there were two major forces involved in mining activities and had diverging interests. The first force was composed of the government institutions and their partners that were interested in policy reforms and the growth of Rwandan mining sector. However, their efforts were not fruitful due to the interests of the second force made up of mining companies that were interested by gain. As nothing prohibited them from buying DRC minerals, they focused their operations in buying DRC minerals, treated them in Rwanda and exported them as Rwandan. Among the owners of mining companies were some politically connected persons and this impeded reforms until Dodd-Frank was adopted and helped the government official to have an upper hand. They outlawed imports of untagged minerals from DRC and enforced business plans submitted during the application for mining licenses. This was easy because the mining business community had panicked due to threat of losing their market. Thus any solution that comforted them was welcome.

to certification systems that were responding to the requirement. In addition, compliance did not carry a heavy burden of changing any policy as the policy was already there, thus it spared the government of political consultations in the process of which some stakeholders could have proposed to resist.

Rwandan government ordered that the traceability system in pilot phase be rolled out to all mine sites in the aftermath of the adoption of the conflict minerals provision and made it mandatory. This demonstrated Rwanda's political will to fight against the illicit trade of minerals from DRC. Thus, this study underscores one of the few cases of effective compliance to economic sanctions.

The actions implemented in the aftermath of the adoption of section 1502 and the fast-tracking of the stalled reforms not only helped to mitigate effects of this conflict minerals law but also fostered the development of Rwandan mining sector and took it to a level that was never reached before. Reforms had been off-track due to the prevalence of cross-border trade of minerals with eastern DRC that desincentivized mining companies to invest in Rwandan mineral extraction. The external pressure by section 1502 was thus the best opportunity for the government of Rwanda to end cross-border minerals trade without resistance.

Rwandan mining operators managed to change incentives and embrace policy actions that counteracted their interests. This happened because Dodd-Frank act constituted an existential threat to the interests of mining operators but not the government side. Thus, government used it as carrot and stick to make mining comply with the business plans they have shelved. After Rwandan government has rallied around all mining operators, different policy actions were implemented to anticipate and mitigate

effects of the conflict minerals provision. This was done by putting in place various strategies in order to protect the market of Rwandan minerals.

The first set of strategies aimed at increasing transparency in its minerals by subscribing to international verification and certification systems. The systems implemented in Rwanda are Certified Trading Chain-CTC (2008-2011) developed by BGR, iTSCi (2011-present) developed by ITRI and RCM (2012-present) managed by ICGLR. Today, iTSCi and RCM run concomitantly and their certificates accompany Rwandan mineral export shipments. The second set of strategies encompass domestic measures that have two main goals. The first goal was to reinforce internal capacity to support certification and transparence as well as fighting fraud in mineral trade business, while the second goal was to increase mineral production not only to cushion losses caused by certification process expenses but also to make it a robust sector that supports economic growth and social welfare of Rwandans. Policy actions taken in this category range from legal and regulatory reforms, institutional reforms, policing and patrolling borders with DRC to fight against smuggling, building physical and soft infrastructure development, capacity building as well as reinforcing monitoring and evaluation systems.

Regarding the effects on Rwanda, the study finds that there were negative effects related to reduction of volumes and value because in spite of Rwanda's mobilization in the mining sector, it did not reach its targets. The growth in volume was the result of the increase in the number of extraction licenses awarded, but profits decreased due to extra costs occasioned by compliance with the conflict minerals provision. When the margin of profitability kept shrinking, it led to staff retrenchment and loss of income to the country and to households. However, there was also a positive long-term effect related to various undertaken reforms and modernization of the mining sector in Rwanda such as

semi-mechanization of Rwandan mines. This positive effect also stems from a sudden halt of cross-border trade of DRC minerals that in the past overshadowed Rwandan minerals and focus on Rwandan mining concessions where investment grew.

In relation to effectiveness of Rwandan policy and strategy to face effects of Dodd-Frank Act, Rwandan compliance achieved the objective of changing the political attitude in relation to trading with groups accused of causing wars and violence in DRC. In this line, Rwandan compliance with the conflict minerals requirement significantly reduced illicit trade of minerals across the border and helped to bring back the trust of clients in Rwandan minerals. Besides, compliance helped Rwanda to change its mining from business-based to extractive-based and this has a long term impact on Rwanda's economy. However, Rwandan compliance did not significantly impact on the main objective section 1502 of Dodd-Frank Act of easing the humanitarian crisis in Congo as underlined in the law because armed groups are still operating in eastern Congo and Rwanda has limited capacity to influence this outcome.

To sum up, the advent of the section 1502 of Dodd-Frank played an important role in changing incentives of private mining operators who have resisted investing in domestic mining –extraction based mining- but focused on importing and re-exporting Congo minerals. In this regard, there was a symbiotic benefit between existing reforms and the conflict minerals provision because reforms helped to quickly comply with the conflict minerals provision and the latter helped to fast-track reforms by removing incentives of private mining operators to trade in Congo minerals. This resulted in the growth of Rwanda mining sector as it will be detailed in chapter 5.

1.7 Structure of the study

This study is divided into six chapters. After this introductory chapter, the second chapter lays the theoretical framework where the economic sanctions as the underlying theory behind conflict minerals provision in relation to Rwanda is discussed and the improvement on the theory is proposed. The third chapter introduces Rwandan involvement in DRC wars and different accusations related to Congo minerals pillaging leveled against Rwanda as the context that triggered the conflict minerals provision. The fourth chapter discusses in details the conflict minerals provision as the core center of this study. This chapter reviews different paragraphs of section 1502 that creates the conflict minerals provision and discussed its effects on different actors and its nature in relation to the economic sanctions literature. The fifth chapter introduces the Rwandan mining sector. In this chapter, the history of Rwandan mining sector and its different phases are discussed. It examines the effects of the conflict minerals provision on Rwanda in general and on the mining sector in particular. The chapter is concluded by a section on factors explaining Rwandan compliance with Section 1502 requirement. The sixth chapter details Rwandan policy actions to comply with the requirement of section 1502 and some actors driving these policy actions. These policy actions are built on premises that they constitute the continuation of reforms undertaken in 2006. This chapter also evaluates the effectiveness of Rwandan policy responses as compliance mechanism to the conflict minerals provision requirement. The study is wound up by a general conclusion and recommendations.

CHAPTER 2: THEORETICAL CONSIDERATIONS: ECONOMIC SANCTIONS COMPLIANCE AND EFFECTIVENESS

In their bilateral relations, states use different tools to enhance their foreign policy. After the end of the Cold War, when the United States emerged as the sole hegemonic power in international relations, it used different foreign policy tools to influence the behavior of other states. These tools varied depending on many factors such as the level of friendship between the United States and the concerned country, the size of the targeted country, its vulnerabilities and so on. Scholars have classified these tools into three main group namely use of force, economic sanction and engagement with other peaceful means (Drezner, 2003b; Li & Drury, 2004). This chapter will solely focus on economic sanctions and their effectiveness.

To tackle the endemic violence and armed conflict in DRC, the US has so far used engagement and economic sanctions. One of the tools used to attempt to salvage the situation in DRC is to regulate trade of minerals from the Great Lakes region using the conflict minerals provision of the Dodd-Frank Act. Section 1502 of the Dodd-Frank Act has been identified by some scholars as one category of economic sanction as it restricts trade of four minerals namely tin, tantalum, tungsten and gold (3TG) from a specific African region i.e. the DRC and its adjoining parties with the objective of changing behavior of these minerals producing countries related to supporting armed groups operating in this region (Owen, 2013; Parker & Vadheim, 2013).

This law constitutes a barrier to free trade of minerals from the region it identified as "conflict zone" by imposing financial and reputational hurdles to US regulated manufacturing companies that use components of minerals sourced from this zone. Even though some scholars such as Whitney (2015) suggests that section 1502 does not directly

target central African 3TG producing countries, a meticulous analysis of this law shows that this provision targets states and non-state actors in the African Great Lakes region. By creating a specific conflict zone and ordering all companies listed on US stock market to exercise due diligence and report their use of minerals sourced from this zone, the US legislator directly targeted the demarcated zone. Directly targeting companies was interpreted as a means to increase the effectiveness of the law (Owen, 2013) as in the past different economic sanction initiatives failed because the US did not have effective means to enforce them. This is the case of the blood diamond laws (see Ndumbe, 2005; Ylönen, 2012). By involving the reputation of manufacturing companies, the US increased the likelihood of effectiveness as the US market is so far important for hi-tech products containing conflict minerals components and the US leaders know that companies mind a lot about their reputation as the US consumers attach a great importance to the potential harm that their buying of products labelled "not-DRC-conflict free" would cause to innocent people in the conflict zone (Whitney, 2015). So, the calculation of the US in imposing the conflict minerals provision was based on the premise that companies would not risk their businesses because of the reprehensible behavior of some actors in African great lakes region.

Regarding the effectiveness of sanctions, the literature has most focused on economic conditions of the receiving state namely the economic vulnerability to hypothesize on the effectiveness. Some scholars have added the availability of internal forces in democratic countries as a lever for sanctions effectiveness because citizens are able to question policies that are making them bear unnecessary sufferings, thus contributing in political behavior change. This study discusses another factor that has not yet been discussed in the economic sanctions theory namely the presence of internal

policy setting that would accommodate the demand of the sender of sanctions. I consider this factor important in the effectiveness of sanctions as illustrated by the case of Rwanda versus conflict minerals provision compliance and effectiveness.

The economic sanctions theory was chosen as it better explains the relationship between Rwanda and the US as created by the conflict minerals provision. The understanding of factors leading to economic sanction compliance and effectiveness will help in understanding how Rwanda behaved when faced by effects of section 1502 of Dodd-Frank Act that constitutes the object of this study. The economic sanctions theory helps to verify if the thesis argument is plausible.

This chapter attempts to define economic sanctions and examine conditions for the economic sanctions compliance and effectiveness. In this regard, this chapter will, in the first section, define economic sanctions and explore different forms of economic sanctions. The second section will discuss factors leading to economic sanctions effectiveness and compliance whereas the third section of this chapter will discuss on the gap in the sanctions literature in relations to its effectiveness and suggest a new factor.

2.1. Definition and typology of economic sanctions

2.1.1 Definition

The first comprehensive definition of economic sanctions is given by Galtung (1967) who defines economic sanction as "actions initiated by one or more international actors ("the senders") against one or more others ("the receivers") with each or both of two purposes: to punish the receiver by depriving him some value and/or to make the receiver comply with certain norms the sender deems important (p.379)." Prima facie, this definition suggests that there are no pre-set international norms but the ones the sender thinks they are important. As it was argued by Olson (1979), Galtung's definition

is the most comprehensive as it encompasses two expected outcomes of economic sanctions namely punishing the target state economically and attempting to make the target state comply with certain important norms which might be economic, political, social or humanitarian. Galtung's economic sanctions departure is the vulnerability and concentration of the economy of the target state (Galtung, 1967, p.385-387). Vulnerability of a country has many determinants but the one dealt with in this study is dependence on a product or a set of products for export. Vulnerability will be discussed in details in a separate section at the end of this chapter. Concentration can be understood as the target state having one dominant trade partner which makes it easy to affect the target's trade. The best case of vulnerability was summarized by case of Peru that in 1969 completely depended on the US firms and market for its products but also for its imports (Olson, 1979). Today's economic sanctions are no longer limited to classic trade sanctions as they are diverse and levied on a number of things such as financing, investment, aid, technology and so on.

Boomen (2014) improved the Galtung's definition by adding a constructivist view. He defined economic sanctions as measures taken by the sending state with "the stated intention of altering the behavior of the targeted states" to abide by international ethical norms (p.1). According to this scholar, the basis of sanctions is to coerce behavior change in a state that is behaving unethically. This means that measures taken for pure economic ends do not amount to economic sanctions. According to Boomen, the logical logarithm of economic sanction is as follows: a state is engaged in an ethical behavior, another state or groups of states apply sanctions to the rogue state, sanctions hurt the rogue state and create negative utility, when the cost of sanctions is greater than the benefit of behaving unethically, then the guilty state changes its behavior to conform to the required ethical

norms. He goes on arguing that the sending state chooses economic sanctions as foreign policy tool when diplomatic engagement is not enough to persuade the target state and the use of military force is undesirable or disproportionate to the intended goal. He suggests that the importance of sanctions is better understood under the constructivist theory whereby sanctions, regardless of their effectiveness to change the behavior, are used to give the signal that certain conducts or acts of a state are not acceptable and cannot be tolerated. (p.2).

2.1.2 Historical evolution of economic sanctions typology

2.1.2.1 MULTILATERAL VS UNILATERAL SANCTIONS

Economic sanctions can be classified according to nature of the sender. In this regard, sanctions are either multilateral or unilateral. Multilateral sanctions are those decided by international organizations such the UN, European Union or the African Union. Unilateral sanctions are decided by one state or an ad hoc group of states (Eriksson, 2011). In general, multilateral sanctions are intended to address a serious issue of international concern whereas unilateral sanctions can also address an issue in bilateral relations of states. Multilateral sanctions are the oldest but are not frequently applied unlike unilateral sanctions that are easy to decide (Ang & Peksen, 2007). Between 1945 and 1990, multilateral sanctions were only applied twice while they reached 30 times in years between 1990 and 2010 (Eriksson, 2011) due to the relative ease of deciding them in the UN Security Council after the fall of USSR.

2.1.2.2 COMPREHENSIVE VS SMART SANCTIONS

Eriksson explains that the understanding of sanctions evolved in time depending on the issues they aimed to solve. The first wave of sanctions literature debated the containment of aggression in 1930s. This the case of sanctions issued by the League of

Nations in 1935 to deal with the aggression of Ethiopia by Mussolini's Italy (Kaempfer & Lowenberg, 2007). The second wave immerged in 1960s to curtail interests of white settlers that obtruded decolonization and independence of Rhodesia (Galtung, 1967, see also Boomen, 2014; Grauvogel & von Soest, 2014; Kaempfer & Lowenberg, 2007; Krustev, 2010; Lektzian & Patterson, 2015; Nossal, 1987; Wallensteen & Grusell, 2012). In the third trend of sanctions the literature debated ways of putting pressure to states to change their internal policies that hindered international agreed norms. This was the case of sanctions against Apartheid South Africa (Drezner, 2003a; Early & Spice, 2015). In 1990s with the sanctions against Iraq, a new wave of sanctions immerged and this time the focus was the side effects of comprehensive sanctions. The Iraqi sanctions triggered a new wave of smart or targeted sanctions that emerged in 2000s to correct the harm caused to civilians (Eriksson, 2011).

From the four successive waves of sanctions mentioned above, two different types of sanctions emerge and these types defer by scope. In this regards, sanctions can either be comprehensive or targeted/ smart. Eriksson (2011) defines comprehensive sanctions as those targeting the state as a whole whereas smart or targeted sanctions are those directed either to specific persons or group of persons, specific commodities or to a specific region. However, the boundary of comprehensive and targeted is sometimes blurry. It is often difficult to target a vital commodity from a state without targeting the existence of the state itself (Owen, 2013). This is the case of sanctions against petroleum oil for some oil-dependent countries (Tostensen & Bull, 2002).

Other scholars define comprehensiveness of sanctions from the objectives rather than the object of the sanctions. Olson (1979) discussing the evolution of the outcome of sanctions argued that sanctions could escalate from specific to comprehensive. The Cold

war era sanctions, though they were not as frequent as those levied in the post-Cold war era, could escalate and change from compliance to specific objective to a more comprehensive level with the total goal of regime change. This was the case of Chile's Allende regime sanctions which started with the objective of securing compensation for American copper corporations that were nationalized but ended up with the objective of subversion of the authority and drastic regime change (Olson, 1979). The US sanctions in that period of time especially in Latin America sought to change regimes for more favorable ones. This was the case of sanction against Dominican Republic between 1960 and 1962, Chile between 1970 and 1973 and Brazil between 1961 and 1964 (Portela, 2014).

2.1.2.3 COLD WAR VS POST-COLD WAR ECONOMIC SANCTIONS

The use of sanctions proliferated after the Cold. During Cold war, it was difficult to impose economic sanctions because of the fear that a sanctioned state would leave the hostile block for a friendlier one. Unilateral sanctions against an ally would make them swing to the opposite block whereas sanctions against an enemy state were simply ignored as trade continued as usual among countries in the same block (Eriksson, 2011). Moreover, it was practically impossible to use the UN system to sanction one country because its allies would block by veto such a resolution (Boomen, 2014). Only few exceptions such as Rhodesia and South Africa economic sanctions proposals went through in the UN Security council (Cleveland, 2002). At the end of the Cold War and the rise of humanitarianism that replaced the threat of war, economic sanctions became a common currency to influence behavior of states that were behaving contrary to the established international norms. The pressure of Cold War gone, economic sanctions got more important in foreign relations as the use the military force became domestically unpopular

as a means to advance national foreign policy. As Boomen illustrated, 248 cases of sanctions were imposed in 76 years from 1914 to 1990, whereas 343 sanctions were levied in 20 years that followed the end of the cold war (Boomen, 2014, p. 2).

Likewise, the form of sanctions evolved with the end of the cold war. Whereas at the sending states preferred comprehensive sanctions during the cold war, they later evolved into smart/targeted sanctions after generalized failure of comprehensive sanctions and their perverse effects on the general population (Eriksson, 2011). A high toll of civilian casualties caused by comprehensive economic sanctions, such as in Iraqi case where a total number of 1 million people died as direct or indirect consequence of sanctions, led people to think about smart sanctions that target only people who are directly involved in decision making and their supporters (Eriksson, 2011). Even though smart sanctions looked as an improvement, they are also revealed to be ineffective as general sanctions in changing political behavior of target state and most of them also indirectly affect the daily lives of ordinary citizens. This is the case of freeze of aid or taking sanctions against a national airline that eventually affects innocent travelers who are not related to decision makers (Tostensen & Bull, 2002).

All in all, economic sanctions are frequently used, despite their inefficiency, because they constitute a relief to the citizens of the sending state that their country is not standing idle against a reprehensible behavior by another state (Ang & Peksen, 2007). It is a clear message that the sending state protests the behavior of the target state and that international norms cannot be violated without consequences (Boomen, 2014).

2.1.2.4 DISGUISED OR SECOND TIER SANCTIONS

There is a less discussed classification of economic sanctions namely undeclared or disguised sanctions. These are the types of implied economic measures that aim at

changing the behavior of target state. They can be active actions of abstention from doing something that is critical for the target. The sort of sanctions are quietly imposed during the implementation of the agreement between states. The illustrative case can be found in the memorandum of understanding that was signed between the USA and the government of India in 1984 for the supply of computer technology. In the course of the implementation, the US delayed delivery of some critical products that would enable India to proceed with its IT project. Purportedly, the US used this contract to silently coerce India to sign the nuclear non-proliferation treaty whose discussions were stalled. The delays in delivery hampered Indian plans and derailed the projects until it was halted as the product in the meantime became obsolete (Dunne, 1996). In other instances, sender states use their multinationals as pipeline to levy sanctions to target states that are most of the time economically weak (Blanchard & Ripsman, 2013; Olson, 1979). The undeclared sanctions should not be confused with the undeclared effects or indirect effects of the declared sanctions. Many authors have extensively written on indirect effects which are effects on the third party or on items that are not previously covered by the sanctions (Krustev, 2010; Wallensteen & Grusell, 2012).

2.1.2.5 CATEGORIZATION BY OBJECTIVE

As economic sanctions vary in their nature as seen above, they also have different objectives. As Nossal (1987) suggested, objectives of sanctions include submission, dissuasion, subversion and symbolism. Submission refers to the situation whereby the sender imposes sanctions expecting that the heavy cost of sanctions in comparison with benefits of reprehensible behavior will make the target country to abandon its policies and comply with the sender's requirement. Dissuasion is the situation when sanctions are imposed with the objective of discouraging the target state and other states from acting in

the same reprehensible manner in the future. Economic sanctions have subversive objective when they are imposed with the goal of disturbing the target political stability and ultimately cause regime change. Symbolism objective can either be international or domestic. International symbolism refers to the sanction situation whereby the goal is not necessarily to impose to the target state heavy sanctions but to express to the international community the outrage of the sender about an intolerable act or the behavior of the target state. Domestic symbolism focuses on effects of imposed sanctions on internal politics of the sender with the view of appeasing the outrage of its population about the reprehensible actions or behavior of the target (Ang & Peksen, 2007). This opinion is shared by Drezner and Drezner (2003) who argue that sanctions, despite their widespread failure and their serious effects on civilian lives where they kill more people than wars, are frequently used because they can play a symbolic function by signaling to the target state and to the world that a certain behavior is not acceptable. While economic sanctions objectives are to alter the targeted state's behavior and/or to elicit conformity with international norms, they usually have more serious collateral damage than their intended objective without necessary reaching their goal. However, they are perpetuated by the constructivist's opinion that despite their failure to alter political behavior of the target, economic sanctions contribute to establish an international norm. Constructivists argue that even if acting ethically does not bear immediate impact, its continued practice helps in shaping normative practice (Boomen, 2014)

2.1.2.6 INDIRECT EFFECTS OF ECONOMIC SANCTIONS

Economic sanctions also affects the levying state and often benefits a third party. So far the US is the country that frequently resorts to economic sanctions in their bilateral relations with other countries whereby the use of sanctions has become a common

currency for Washington policy makers (Leonard, 2015). Economic sanctions range from small scale sanctions to full blown economic blockade. However, economic sanctions hurt both the sender and the receiver. While effects on the target state are obvious, economic sanctions also hurt the businesses of the sending state by keeping at bay companies from the sending state. It is estimated that the US incurs US$18 billion per annum in lost export due to economic sanctions against other countries (Drezner, 2003b). In most cases the benefits of economic sanctions are free ridden by third states (Nossal, 1987). At the end the winner is the third party that takes advantage and creates new relationship with the target state (Leonard, 2015). In some cases, sanctions also lead to the new geopolitical alignment (Bhatia & Trenin, 2015).

2.2 Determinants of effectiveness of and compliance to economic sanctions

Compliance to and effectiveness of economic sanctions are terms that are close and some people take them as synonymous. After attempting to define and explain economic sanctions, it is better to set the definition of what we understand by compliance and effectiveness before we apply them to economic sanctions and examine the factors that determine the compliance and effectiveness.

2.2.1 Compliance and related terms

Raustiala and Slaughter (2002) defined compliance as "a state of conformity or identity between an actor's behavior and a specified rule" (p.539). Compliance is different from obedience which "occurs when an entity adopts rule-induced behavior because it has internalized the norm and has incorporated it into its own internal value system" (Koh, 1997, p.2646). Theories of compliance and theories of implementation and effectiveness are closely related and quite often can be confused. On the one hand, implementation is the process of putting plans, policies or obligations into practice. It varies from putting in

place a legislation, to enforcing it, to the creation of institution and son on. Implementation constitutes an important milestone of compliance, but sometimes compliance can occur without implementation such as when the existing setting matches the subscribed obligation (Victor, Raustiala, & Skolnikoff, 1998). Taking the conflict minerals case[8], some countries included in the conflict minerals zone that are far away from the eastern DRC and do not trade in the designated conflict minerals can claim to be in the state of compliance without implementing any action. This is the case of countries like Angola, the Republic of Congo, Central African Republic or South Sudan whereas Rwanda could not claim the same as it had to implement certain policies to meet the sender's requirement. Raustiala and Slaughter (2002) conclude that though implementation is often critical for compliance, it is does not theoretically constitute either its necessary or sufficient condition.

2.2.2 Effectiveness

On the other, effectiveness is the degree to which a rule is successful in producing the desired result. In this specific case, effectiveness of economic sanctions refers to success of sanctions in inducing changes in behavior of the target. Raustiala and Slaughter understand effectiveness of an international rule such as sanction or incentive as "its degree of furthering rule goals, improving the state of the underlying problem or achieving its policy objective" (Raustiala & Slaughter, 2002, p. 539). As they concluded on implementation, they also stressed that the link between compliance and effectiveness is neither necessary nor sufficient. To support this conclusion, they argued that an international rule can be highly effective with low compliance and that sometimes high

[8] The details on conflict minerals provision will be discussed in chapter 4

levels of compliance might be an indicator of ineffectiveness of the rule as states tend to comply with less demanding rules. Depending on the objective of the sanction, if it is domestic symbolism whereby the sender wants to show its population that it is doing something on a reprehensible behavior, the sole fact of levying sanctions is effectiveness in itself.

From this description, one would infer that while compliance mostly focuses on the behavior of the target, effectiveness can be better evaluated on the side of the sender to check if the fixed objectives were met. Using again the case of conflict minerals, one would talk about compliance by a target country when it changes its behavior to abide by the requirement of the provision or is already in state of conformity with the requirement. Effectiveness on the other hand is the satisfaction the sender gets from the implementations of actions to satisfy the requirement imposed by the provision.

In the following paragraphs, I will use both effectiveness and compliance as two inseparable measure of the utility of sanctions.

2.2.3 Determinants of sanctions compliance and effectiveness

Literature has identified some factors that contribute to sanctions compliance and effectiveness. Bhatia and Trenin (2015) maintain that sanctions tend to work when they are directed against friendly and ally states. Adversary or competing states are likely to resist sanctions. Economic sanctions against an adversary or enemy state may have serious socio-economic consequences but do not necessarily lead to the target state altering its political attitude or behavior (Olson, 1979). Quite often, sanctions against unfriendly state lead to increased nationalism and idolization of the political leaders (Choi & Luo, 2013). Kaempfer and Lowenberg (2007) illustrated this point with different US policy choices versus the same reprehensible behavior by two neighboring countries

China and Taiwan. Kaempfer and Lowenberg showed that the US under Clinton administration chose to levy economic sanctions against Taiwan for its laxity on the trade of endangered species and Taiwan complied as expected by increasing enforcement whereas China whose trade of endangered species was widespread was not sanctioned. Instead the Clinton administration chose to engage China and include this illicit trade on the list of issues that were discussed in trade opening agreements (Kaempfer & Lowenberg, 2007).

Using game theory, Morgan and Bapat (2003) studying behavior of firms against economic sanctions imposed by the sender to their trade partner found that the effectiveness of sanctions depend on the capacity of the sender-country to induce its national firms to abide by sanctions it imposed. Due to interconnectedness of world economy and the economic might of the US, it has the capacity to induce not only national firms but also to make foreign firms to abide by its imposed sanctions and this gives it a considerable policy leverage over sanction laws. Morgan and Bapat suggest that there is high likelihood of violation of sanctions by firms when they place high value on their trade with target states. In this case they tend to violate sanctions regardless of threat from the sender government. Another instance of violation comes from the calculation that they can complete the exchange with the country under sanction before they can be detected.

Besides, the type of the regime matters. Economic sanctions seriously affect the economy and social welfare of the target country but rarely lead to regime change especially for undemocratic ones (Bhatia & Trenin, 2015). Using a qualitative comparative analysis, Grauvogel and von Soest (2014) found that non democratic regimes are persistent against sanctions. They argue that when authoritarian regimes "manage to incorporate sanction into their legitimation strategy, they become more strengthened

rather than weakened". Their analysis shows that regardless of the imbalance of power between the sender and the target-country, non-democratic states can politically withstand sanctions (see also Raustiala & Slaughter, 2002; Beach, 2005). This is the case of sanctions against countries such as Belarus, Cuba, Eritrea, Iran, North Korea, Zimbabwe and Syria that managed to survive despite severe economic consequence of sanctions (Grauvogel & von Soest, 2014; see also Wallensteen & Grusell, 2012). This contradicts the argument of the punishment theory as elaborated Lektzian and Souva (2007) that contends that economic harm by sanctions make domestic forces to claim for compliance with sender's demand and this pressure makes rulers comply. Thus, Grauvogel and von Soest (2014) conclude that failure of sanctions against non-democratic countries is influenced by legitimacy of rulers when it interplays with other conditions earlier identified.

In the same line of idea, Guzman (2002), analyzing compliance, argued that sanctions tend to work better in bilateral setting than in multilateral because sanctions can be easily established and relatively easily managed. As he keeps arguing, multilateral sanctions are difficult to establish and sustain because many states do not want to initiate them but rather free-ride on the sanctioning actions of other states. It is equally difficult for sanctions decreed by international organizations to go unpublicized. As Olson maintains, unavoidable publicity of multilateral sanctions can explain the high rate of their failure. Even though economic sanctions are likely to cause economic downturn in the target-country, they are in most of the cases ineffective politically because of depressed expectations, rise of emotional and nationalistic support to authority and both reasons cement relationship between people and authorities in target countries instead of attacking it. In rare cases, public economic sanctions can be effective depending on their

severity that affects political life (Eriksson, 2011). Despite their anticipated ineffectiveness, public sanctions serve the sender's domestic satisfaction role rather than compliance of the target-state. This is the case of the embargo against USSR during the cold war that from the beginning was doomed to fail but served nationalistic satisfaction whereas it help USSR to justify its control of Eastern Europe (Olson, 1979).

As Olson keeps arguing, the theory of dependency plays a role in understanding how the sender could subtly issue sanctions without making them public. This theory elaborated by Caporaso (1978) seeks to "explore the process of integration of the periphery into the international capitalist system and to assess the developmental implications of this peripheral capitalism" (p. 2). Simply put, it seeks to explain how foreign actors intervene in the domestic life of the peripheral state. As Olson argues, dependency (reliance on foreign actors in critical areas of national economy) helps the sender to dilute domestic cohesiveness and allows "the sender to levy sanctions quietly and subtly" without becoming public and cause political unity (Olson, 1979, p. 483). This is so because with dependency, the sender becomes part of the internal game due to his involvement in the domestic production. Due to loss of identity, the target state has no appropriate values and is not able to find a unifying external threat (Olson, 1979).

Blanchard and Ripsman (2013) studying the effectiveness of sanctions found that their success varies according to the target state strategic interests involved. These interests can be international or domestic. The higher the strategic interests, the more likelihood to comply with economic sanctions (international factor). Likewise, the higher the level of stateness, the less likely compliance is (domestic factor) if societal groups are concerned and vice versa if the political leaders are concerned.

Last but not least, the size and the capacity of both the sender and the target states also matter for sanctions to be effective (Nossal, 1987). According to this author, small states are in most cases dependent on powerful ones and need alliances and bigger markets to survive. This argument is supported by Grauvogel and von Soest, (2014) who suggested that small states are susceptible to sanctions unlike big states that can adapt to economic sanctions. Grauvogel and von Soest's notions smallness and bigness are related to size of the economy rather than the size of the territory.

Apart from compliance factors discussed in preceding paragraphs, there are intrinsic reasons that offset the effectiveness of economic sanction. Galtung (1967) identified six reasons that lead to the failure of economic sanctions to effect policy or regime change. These reasons are related to the fact that sanctions threaten the target country as a collectivity; sanctions cannot be identified from the attacker; they intend to alter country's values that people firmly believe in; the country can adapt to the effect of sanctions, can restructure the economy or survive out of smuggling. Olson (1979) adds to this argument that these conditions better fit when sanctions are public and the target state identifies the sender as an external threat to the nation.

2.2.4 Levels of compliance

Compliance to sanctions has different levels. Compliance could mean conforming to specific demands of the sender such as compensating foreign corporations for their expropriated property or paying damages to the families of victims of terrorist acts (Olson, 1979) such as Libya case (see Drezner, 2003; Kaempfer & Lowenberg, 2007; Krustev, 2010; Morgan & Bapat, 2003; Li & Drury, 2004). In other instances, compliance could mean another advanced level where they seek a more deep or comprehensive change such as regime change or total change of public policies. This is the case of the purpose of

sanctions against Rhodesia (Galtung, 1967), sanctions to oblige Italy to abandon the occupation of Ethiopia or sanctions against South Africa to change apartheid policies (Olson, 1979). The Cuban case is an illustration of sanctions aiming at changing the regime or authority by inciting people to revolt against their leaders assuming that they are not serving people's interests (Choi & Luo, 2013; see also Drezner, 2003; Morgan & Bapat, 2003; Olson, 1979).

2.2.5 Economic sanctions effectiveness

Literature shows that sanctions economically affect target states but are ineffective in altering a state's behavior. The optimistic analysis shows that only 34% of sanctions were effective (Drezner, 2003b) whereas the worst case put the effectiveness at 5% (Pape, 1997)[9], sanctions by the UN being the least implemented with the failure rate of 98% (Boomen, 2014, p.4). The non-implementation of multilateral sanctions beats the logic of sanctions that emphasizes that the higher the cost of sanctions, the higher the chance of compliance. However, the practice shows that when sanctions take longer, they are doomed to fail or when many states participate to sanctioning another, they are doomed to fail (Cleveland, 2002). This is counterintuitive to the calculation of sanctions as the common sense wants to tie compliance to cost of sanctions (Olson, 1979). In the Iraqi case, the UN-imposed sanctions ended up with the unemployment of 23% percent,

[9] The illustrative example is given by Pape (1997) who reviewed the Hufbauer, Schott and Elliott (1990) databases on the effectiveness of economic sanctions and found that they overestimated the success because in most cases, despite a very huge economic loss (between 15.2% of GDP loss in the case of Nigeria and 4.6% in the case of Nepal), economic sanctions failed to change the political behavior of the target state and were followed by military intervention to solve the contentious issue that was previously intended to be solved by economic sanctions. Some of the failed sanctions despite their devastative economic effects include Nigeria vs Biafra (1967), UK/US against Iran (1951), UK/UN against Rhodesia (1965), US/Netherland against Suriname (1982), US vs Cambodia (1975), US vs Salvador (1987), South Africa vs Lesotho (1982). In these cases, target countries refused to make any concession and the situation was changed by the use of military force (in most cases sponsoring coups to change the regime). The case where sanctions were effective is India vs Nepal in 1989 where Nepal complied with India's request of refraining from purchasing Chinese weapons.

the hike of prices of 100%, crippled infrastructure and the malnutrition that caused the death of 200 to 300 thousand of Children under 5 years (Boomen, 2014, p.5). This toll is greater than the number of casualties caused by the combined Iraqi wars (Allen & Lektzian, 2013; Mueller & Mueller, 1999). This clearly shows that sanctions do not in reality constitute a moral alternative to the war. However, sanctions could not manage to change Iraqi regime but weakened it substantially that it eased the work of US coalition when they invaded Iraq to remove Saddam Hussein regime (Kaempfer & Lowenberg, 2007).

Versus sanctions, targeted states have a choice between complying and not complying with them. Different schools of thought explain differently why and when target states comply with sanctions and their effectiveness. Blanchard and Ripsman, (2013) differentiate on the one hand commercial liberals that predict the political change caused by economic sanctions by highlighting the importance of sanctions' economic cost. Commercial liberals argue that the higher the cost of the economic sanction, the greater the chance of complying (p.17-19). On the other, political realists according to these authors look at sanctions in the lenses of political imperatives and argue that economic sanctions cannot succeed to change the behavior of a target state that pursues offending policy for strategic or political reasons (p. 18-20). In between the two extreme schools of thought, are located the conditional approach. Its tenants argue that the high economic cost caused by sanctions combined with the international environment leads to political change. They however reiterates that democratic target states are susceptible to sanctions whereas authoritarian states are not (Blanchard & Ripsman, 2013, p.21-24).

On the effectiveness of economic sanctions to achieve regime change, Galtung argues that there is a misleading understanding or theory that establishes a rough

correlation between economic dislocation of the target state and its political disintegration. He argues that this theory is naïve as "it neglects the unifying effects of external economic sanctions on a target country". In fact, the deprivation caused by sanctions constitutes a plinth for rulers to consolidate their political power. The history of sanctions is rich of examples. Sanctions against Italy to depart Ethiopia led to the consolidation of Mussolini's personal power whereas US sanctions against Cuba helped Castro regime to "divert attention from internal problems and using US sanctions as a rallying tool and a convincing reason to increase domestic productivity" for self-reliance (Olson, 1979; see also Choi & Luo, 2013).

In a nutshell, compliance of the target state and the effectiveness of sanctions do not depend on one factor. So far, literature is not conclusive about which factor is determinant and which is not. Despite different critics about their ineffectiveness, economic sanctions still constitute a popular tool in the hands of decision makers as recently illustrated by section 1502 of the Dodd-Frank Act.

2.3 What lacks in the economic sanctions' effectiveness theory

The above discussion shows that the sanctions theory focused on factors related to economic vulnerability of the target state as the key factor for the effectiveness of sanctions, and an important trigger for compliance to sanctions (Whang & Kim, 2015). This section will add another important factor namely the internal predisposition of the target state to implement sanctions requirement.

2.3.1 Economic vulnerability

The economic sanction literature has emphasized that for economic sanctions to affect the target country, they have to ride on its vulnerability. The sending country has to take into account vulnerabilities of a country it wants to pressure with sanctions.

Economic vulnerability is more pronounced for small economic powers than big powers. As argued by Olson (1979) when a country is a small economic, thus fragile and vulnerable, it becomes an easy prey for the senders (quite often big powers) to levy sanctions against it. The sanctions in this case are usually sticks and carrots to mend the political behavior of a target state (see also Galtung, 2016; Krustev, 2010; Portela, 2014; Seitz, 2015).

Vulnerability theory is applied to different branches of research such as security, international relations, political economy, geoscience, medicine, disaster management, sociology and others. In this piece of work, I am more interested in economic vulnerability. All these branches share the basic definition of vulnerability which is the property of being easily hurt or attacked. It is translated into lack of sufficient "capacities to prevent, prepare for, face and cope with hazards and disasters" (Nathan, 2011, p. 564). The economic vulnerability stems from the lack of economic resilience. A state is said to be economically vulnerable when it is easily negatively affected by external economic shocks (Guillaumont, 1999) stemming from its openness (Briguglio, Cordina, Farrugia, & Vella, 2009) . For the less developed economies (small economic powers), vulnerability has two main factors: dependency and concentration (Briguglio et al., 2009; Galtung, 1967).

There is economic dependency when a state economy is not diversified and it relies on export of the same types of products, quite often primary products (Demissie, 2014). This is the case of many Sub-Saharan African States that depend on the export of primary commodities such as agriculture products, raw materials such as minerals, timber and so on. These countries can neither fix the price for their commodities nor can they master price fluctuations on the international market that largely depend on the health of

economies in developed countries (Andrews, Bocoum, & Tshimena, 2008; Mancini et al., 2015). Furthermore, the export of these products are subject to different regulations and is affected by the conditionality imposed by the buying states for the fulfilment of some principles or norms they deem important (Portela, 2014). There is concentration when a country's economy depends on one or few trade partners for the exports of its products (Hårsmar, 2014).

Dependence and concentration attract a lot of multinationals and other foreign investors in the production of these raw materials on which small powers depend to ensure quality of exported products. The presence of these foreigners in the production chain makes it easier for senders to levy sanctions and difficult for the target countries to resist them (Olson, 1979). The case of African countries is that they depend a lot on their former colonial masters and the biggest part of their foreign trade is done with them as they ensure continuation of what they set up during colonial times, be plantations of commercial crops that Africans do not consume or the exploitation of minerals that are exported outside Africa (UNECA, 2015).

The economic vulnerability theory is relevant in this research as it helps to understand why Rwanda is easily susceptible to US pressure exerted through section 1502 of the Dodd-Frank Act. The vulnerabilities related to Rwanda's minerals production will be discussed in details in chapter 5. However, vulnerability is not enough to explain Rwandan compliance as there are examples in the literature showing that in similar cases target countries resisted. Thus, I suggest another factor that reinforced vulnerability to convince Rwanda to comply namely the presence of policies that were likely to facilitate the implementation of the requirement of the US conveyed through section 1502 of Dodd-Frank Act.

2.3.2 Internal policy setting prior to sanctions

Equally important to vulnerability that helps the sender in its calculations when levying economic sanctions, the internal policy setting prior to the sanctions helps target state to decide whether to comply or not with economic sanctions and to lead to sanctions effectiveness. Unlike vulnerability that mostly yields in sanctions compliance in democratic countries, where citizens are entitled to question their leaders about public policies that make them suffer (Kaempfer & Lowenberg, 2007), the internal policy setting constitutes an incentive or encouragement to target states irrespective of whether it is democratic or not to decide whether or not to comply.

When sanctions are issued, different stakeholders in sanctions implementation looks at pre-existing policy framework to gauge whether it can accommodate the demand of the sender without any other cost or if it can be reviewed to accommodate such demand. Policy makers identify areas that can ease implementation without causing a political problem and builds on them to take a positive attitude towards sanctions. In relation to Rwandan attitudes towards conflict minerals for example, stakeholders such as the BGR and ITRI encouraged Rwanda to roll out the existing traceability system that was already in place as a satisfying or satisficing action to implement Dodd-Frank requirement, pending putting in place a more robust system because there was no further political consensus or consultations needed (BGR & OGMR, 2011).

Had Rwanda not embarked on comprehensive mining sector reforms and transparence measures prior to Dodd-Frank adoption, it would have been difficult to immediately jump on the Dodd-Frank implementation wagon. It would have been difficult because it would have required intensive political consultations to agree on which decision to take. The mining sector reforms that had been under implementation

for four years with some delays due to counter-incentives among some concerned actors, constituted a ground for rallying all stakeholders in mining sector when they were all threatened by the international boycott due to the conflict minerals provision (Interview of February 25th, 2016 with Minister of State in Charge of mining)..

Preexisting domestic policies are important because when economic sanctions befell a state, especially small economies, they are immediately followed by panic among decision makers that sometimes blurs their discernment capacity to choose the right policy measures. Thus, small improvements on ongoing policies constitute an open window that is used as quick win solution to calm minds and demonstrate good will to cooperate with the sender, and start thinking on serious and long term policy measures (Interview of March 2nd, 2016 with Prof. Michael Biryabarema, DDG of RNRA).

In the case of Rwanda, the ongoing implementation of Certified Trading Chain (CTC) and its prompt roll-out on all mines in Rwanda was used in the first place to respond to the requirement of conflict minerals provision and to show the sender that the government is willing to comply with the requirement (BGR & OGMR, 2011). CTC was later discarded in favor of the iTSCi that is user friendly but the former had played its role to mitigate panic among mining operators and create some trust among clients of Rwandan minerals (R. Cook et al., 2014).

Could Rwanda had taken an opposite direction of resisting the conflict minerals requirement? I doubt about this but the combination of Rwanda's economic vulnerability and pre-existence of policy reforms that are in line with the requirement of Dodd-Frank presaged that Rwanda would lean in the direction of complying rather than resisting.

2.4 Conclusion

This chapter provided a definition of economic sanctions and their different types. Whereas bilateral sanctions were preferred during the cold war but could not easily be levied due to uncompromising blocks within the UN Security Council, bilateral sanctions proliferated after the end of the cold war when the US became a political and economic hegemon. Of course, it also became easier to reach an agreement within the UN Security Council, thus the number of multilateral sanctions also increased. Likewise, economic sanctions evolved from comprehensive to smart sanctions as serious consequences to innocent civilian population attracted attention.

The increase in use of economic sanction positively collated with their failure to bend sanctioned states to change their reprehensible behavior. Literature laid down conditions that might lead to sanctions compliance and effectiveness but none was conclusive. Many scholars that studies economic sanctions agree that sanctions are likely to work when they are levied against a friendly state, small economic power and democratic. The absence of one of these factors is likely to lead to resistance.

Thus, it is clear that the existing literature has unfilled gap in explaining why target countries that are expected to resist would comply and vice versa. Thus, I attempt to fill this gap by formulating the hypothesis that in addition to economic vulnerability, for economic sanctions to reach their intended goal, the internal pre-existing policy setting plays a crucial role in especially in non-democratic states. When there are prior or ongoing policies that can easily accommodate the whole or part of the demand of the sanctions sender without causing political shame to the leaders, the target state easily complies as it is easy to rally different domestic stakeholders in the implementation of the requirement. However, when compliance with the demand of the sender requires to completely change

the existing policy, it generates resistance among domestic stakeholders that had incentives in the previous policy framework and this contributes to the failure of sanctions to yield its expected goals.

The next chapter will introduce why Rwanda was sanctioned, i.e. its alleged role in illegal exploitation of Congo minerals during its occupation between 1998 and 2003 and the support to eastern DRC armed groups that illicitly exploited and traded in Congo minerals to finance their war operations that caused millions of casualties.

CHAPTER 3: RWANDA'S ALLEGED ROLE IN CONGO'S MINERAL EXPLOITATION: THE GENESIS OF CONFLICT MINERALS PROVISION

The conflict minerals provision that is discussed in details in the next chapter is a direct consequence of unrelenting wars that started in 1996 in today's Democratic Republic of Congo, the then Zaire. The first Congo war (1996 -1997) indirect roots lie in perennial problems of Congolese of Rwandan origin who migrated in eastern Congo at different times in history and who were deprived of their citizenship and other rights attached to it such as land as well as civil and political rights by the post-independence regimes in Zaire (Lemarchand, 2009; UNECA, 2015). The direct cause is linked with the presence of massive 1994 Rwandan Hutu refugees in eastern DRC that posed security threat to the new government in Rwanda (Mamdani, 2001). Rwanda is alleged to have taken a decisive role in a number of DRC wars since 1996. These wars had many consequences ranging from DRC political instability, incessant violence in eastern DRC, illegal exploitation of DRC natural resources, and grave violations of human rights and humanitarian law. This chapter discusses Rwandan role in DRC war and its alleged role in the exploitation of DRC minerals that triggered the conflict minerals provision. To examine the role of Rwanda, a historical connection between Democratic Republic of Congo and Rwanda will be established in the first section. The subsequent sections will peruse the role of Rwanda in two Congo wars and allegations of minerals plunder, how the international community reacted and the Rwanda's counter-reaction.

The purpose of analyzing the role of Rwanda in Congo wars that occurred between 1996 and 2003 helps to understand why the United States Congress chose economic sanction as foreign policy tool to engage countries that trade in the designated minerals. The US adopted the conflict minerals provision within the Dodd-Frank Act to persuade

Congo neighboring countries to stop any action that exacerbate Congo wars and violence especially doing business with armed groups operating in eastern Congo.

3.1 Rwanda /DRC shared history: Rwandan immigration into Congo and vice versa and claims for political rights

Whereas Rwanda as a unified country was already formed by 18th Century, the current DRC is an amalgamation of different 19th century kingdoms and tribal chiefdoms that were pulled together under the Congo Free State, a private property of King Leopold II of Belgium as recognized by the 1884-1885 Berlin conference on partition of Africa (Acemoglu, Johnson, & Robinson, 2000). Since the end of 17th century, there have been migratory movements across borders between Rwanda and territories that constitute the current eastern DRC. Rwandan migrants in the DRC can be grouped in three categories. The first categories is composed of Rwandans who settled in DRC before the Berlin Conference. This category is composed of people who migrated in current parts of eastern DRC on their own and others who migrated there in connection with military expeditions and occupation. The second batch is composed of migrant workers and their families who were installed in DRC by the Belgian colonial administration. The third category is composed of refugees who entered the DRC territory at different times. In addition, there are many DRC citizens living in Rwanda who have different statuses.

3.1.1 Pre-Berlin Conference immigrants

Before Berlin Conference, the kingdom of Rwanda was in constant contact with small chiefdoms in the current South and North Kivu provinces in eastern Congo. Some chiefdoms were Rwandan tributaries. Rwandan monarchs carried out a number of military expeditions to surrender to their power chiefs who were not paying tributes such as Nsibura Nyebunga, Rutaganda and Katabirurwa, princes of Bunyabungo in current

South Kivu province, Kabego and Nkundiye of Idjwi, as well as Muvunyi son of Kalinda the chief of Buhunde in current north Kivu province (Kagame, 1972). In return, kings from eastern Congo also attacked Rwanda in a number of occasions especially when they took advantage of the weakness of Rwandan kingdom in periods of succession or when other neighboring kingdoms have attacked, or they rebelled to get independence from Rwandan influence. This is the case of Nsibura Nyebunga who attacked Rwanda and killed the Rwandan monarch and Nkundiye that rose up the Idjwi island population against Rwandan influence and was letter killed in an attack that aimed to punish him for this behavior (idem). Whenever Rwandan military expeditions were successful, Rwandan monarchs installed Rwandans or loyal local persons as chiefs of the newly occupied territory and many Rwandans especially the army stayed there to assist in the administration of the conquered territory. These chiefs and their assistants came with their families, their army and servants who after many generations became integrated into natives (Lemarchand, 2009). Whenever there were social or political troubles in Rwanda, many Rwandans sought asylum in these territories where some of their relatives lived (Kagame, 1972).

Significant Rwandan migration to eastern DRC started in 17th century. Since late 17th century and more intensely in the middle and late 19th century, the Kinyarwanda speaking cattle herders migrated in South Kivu plateaus of Ruzizi and Mulenge looking for pasture and settled there since then (Prunier, 2009). They first integrated in the local Bafulero chiefdoms they found in place, but after growing in number, they founded their own tribe of Banyamulenge. Part of current DRC problems are based on the denial of nationality to the descendants of this tribe (Lemarchand, 2009). In 1880s when the Rwandan monarch Kigeli IV Rwabugiri died, there was a fratricidal succession war

among princes and their supporters and the side that lost the war sought exile to their friendly chiefs in current eastern DRC and southeastern Uganda where they multiplied and became big families. Most of them had their friends and families that were settled there during victorious military expedition and this increased a number of Kinyarwanda speaking in North Kivu (Prunier, 2009).

3.1.2 Migration during colonial period

The Berlin Conference awarded the kingdoms of Rwanda and Burundi together with different kingdoms that form the current mainland Tanzania to Germany. Following the partition of Africa among European powers, the latter abolished expansion wars among various African kingdoms and limited migrations across colonies by introducing travel documents. They also started regulating movements of related people living across borders of different colonies (Hrituleac, 2011). Thus migration from Rwanda to eastern Congo stopped for a while. After the defeat of Germany in World War I, its colony of East Africa was reorganized as a mandate of the League of Nations and put under tutorship of World War I winners whereby Rwanda and Burundi were placed under the tutorship of the Kingdom of Belgium and annexed of the big Belgium-Congo whereas Tanganyika taken by the British.

Belgian colonial administration, after finding out that Rwanda was overpopulated whereas Belgian Congo had labor shortage, they crafted a plan of moving Rwandan laborers to work in colonial plantations and mining concessions in Belgian Congo. In 1920s more than 7,000 Banyarwanda men with their families were settled in Katanga and Kasai provinces to worker as miners. Belgian colonial administration also created different zones for Banyarwanda in Masisi and Rutchuru in current North Kivu, where by 1952 around 8000 households were settled to work in colonial plantations

(Lemarchand, 2009). All these people lost connection with their country of origin. At the independence of Congo in 1960, Belgian administration did not clarify the status of these former Rwandans and the post-colonial authority kept changing its position about whether or not they should acquire Congolese citizenship until late 1980s when Zairean authorities took a bold decision to deny them nationality rights (Jackson, 2007; Koen Vlassenroot & Huggins, 2005).

3.1.3 Post-independence migratory movements between both countries

The issue of nationality of Congolese of Rwandan origin was complicated by the flux of more Rwandan refugees mainly the ethnic Tutsi following the overthrow of the monarchy in Rwanda in 1959 and civil and political troubles as well as ethnic cleansing that followed and led a number of refugees to eastern Congo until 1973. These refugees were assimilated in Congolese population and some got important political and administrative posts within the Zairean government (Prunier, 2009). It became difficult to differentiate the rightful people to benefit from the Congolese citizenship as all of them were referred to as Banyarwanda. Therefore, the Congolese leaders, depending on their convenient interests, kept moving the boundaries of the starting year as a condition to be eligible for the nationality. This rendered many rightful Congolese of Rwandan origin stateless and they grew unsatisfied of their government (Jackson, 2007). It is in this context that most of their youth together with Tutsi refugee youth joined the Rwanda Patriotic Front/Army (RPF/A) rebellion in 1990 with the hope that it will help them to come back later to reclaim their rights (Lemarchand, 2009).

In 1994, after the defeat by RPF over the Hutu government that perpetrated the genocide against Tutsi in Rwanda, the second batch of Rwandan refugees composed of ethnic Hutu entered DRC and their camps were installed in areas of eastern DRC with a

considerable number of Congolese of Rwanda origin who are majority Tutsi and some 1959 refugees who had not yet repatriated (Mamdani, 2001). This last batch of refugees of around 2 million people were mixed up with the elements of defeated armed forces with their weapons (CIA, 1994; MSF, 2014; UNHCR, 2000). These refugees as we will see it below did not only pose security threat to the Rwandan government but also started attacking the Congolese Tutsi who lived near the refugee camps in eastern DRC (CIA, 1994; Ubuntu, 2012). This was the immediate trigger of the 1996 DRC war that started with the attack of Rwandan army into DRC to forcefully repatriate Rwandan Hutu refugees of 1994, and later continued with the overthrow of Mobutu regime in 1997. The war resumed one year later when former allies became enemies. Up to now, the remnants of the 1994 defeated Rwandan army who regrouped under FDLR (Forces Démocratiques pour la Libération du Rwanda) are still threatening Rwanda from eastern Congo forests (Spittaels & Hilgert, 2008; UNGoE, 2015a).

On the side of Congolese, there were also some movements of Congolese migrants to Rwanda. Due to bad governance in Congo/Zaire that led to economy collapse in 1970s-1990s and the plunder Congo wealth by the Mobutu administration, many Congolese nationals settled in Rwanda since early 1980s looking for jobs and served as teachers in secondary schools, and in some commercial and in vocational works such as carpenters, garage mechanics, and barbers and so on. Before 1994, almost all Rwandan secondary schools had a Congolese teacher the same with majority hair salons and other vocational jobs. Contrary to Rwandans in Congo, the status of Congolese in Rwanda was clear from the beginning and they did not claim any right attached to Rwandan citizenship. As a result of insecurity in eastern DRC since the arrival of Rwandan Hutu refugees in eastern DRC in 1994 and the war that ensued, around 72,000 Congolese refugees are hosted in

different camps in Rwanda for the last 20 years and there is no hope for their near-future repatriation (UNHCR, 2014).

3.1.4 Pre-war political climate between both states

Regarding the pre-1996 Congo war inter-state relations, Rwanda and DRC supported each other and this could explain why the Mobutu regime, despite integrating Rwandan refugees, was reluctant to grant nationality to Kinyarwanda speaking Congolese (Mwakikagile, 2013). To begin with, the Rwanda government under President Habyarimana Juvenal was very close to the Mobutu regime in Congo. Their friendship started at the relationship started when Rwandan army on request of Belgium sent a battalion to support Mobutu forces in their decisive military battle against to Simba Maoist rebellion (Nzongola-Ntalaja, 2002). At that time both Mobutu and Habyarimana were ministers of defense of their respective countries. When both became presidents of their respective countries, they enjoyed good bilateral relationships and when RPF attacked Rwanda in 1990, Zaire was the first country to send troops at the rescue of the Kigali regime (Mwakikagile, 2013). Thereafter, President Mobutu organized the first peace negotiations between the Rwandan government and RPF at N'sele and then Gbadolite in Zaire where he attempted to mediate between both belligerents. Zaire government was present in Rwanda peace negotiations in Arusha Tanzania until the end and when the Hutu regime was defeated after president Habyarimana death, Mobutu regime welcomed in Zaire around 2 million Rwandans refugees including the entire defeated Rwanda armed forces who fled to Zaire with their equipment (Mamdani, 2001; Prunier, 2009).

3.2 Rwandan Crisis: trigger of DRC crisis

Since October 1990, a fratricidal war started in Rwanda between RPF/RPA (a force mainly composed of Rwandan refugees from neighboring countries dominated by Tutsi) and the Kigali government dominated by Hutu. As mentioned above, Zaire government led by president Mobutu Sese Seko supported the then Government of Rwanda to fight against the invasion of RPF/RPA (Clark, 2001b; Kuperman, 2001). In addition, the eastern part of Congo (the then Zaire) has the same ethnic groups as Rwanda. During Rwandan war, many Tutsi youth from Congo (refugees and nationals) joined the RPF ranks to fight against the regime in Rwanda. The war ended in 1994 with the genocide against Tutsi that claimed life of more than 1 million people and the defeat of the government forces that took part in the genocide. The defeated army fled to eastern Zaire/DRC where they were welcomed by the Mobutu government (Mamdani, 2001). Once settled in eastern Congo, the defeated army started reorganizing to attack Rwanda but also some hardline elements started chasing and killing Congolese Tutsi in eastern DRC province of North Kivu (Arimatsu, 2012). The insecurity caused by the presence of genocide perpetrators in eastern DR Congo led to a massive displacement of Tutsi population who sought refuge in neighboring countries including Rwanda that shelters to date more than 72,000 Congolese refugees who kept increasing in number as security worsened (UNHCR, 2014).

The new government in Rwanda appealed to the international community to separate Rwandan civilian refugees from the army and other weapon bears in refugee camps along its border in eastern DRC, to eventually repatriate Rwandan refugees or to relocate them in places far away from the Rwandan border as provided for by international standards on refugee camps settlement (Mamdani, 2001). When the

international community failed to separate the armed forces from civilians and to remove camps from the Rwandan borders, and when the former Rwandan armed forces started initiating military attacks on Rwanda, the new Rwandan government, in collaboration with Uganda launched an attack that had the primary purpose of forcibly repatriating Rwandan civilian refugees, destroy military capabilities of the former Rwandan armed forces on the Congolese territory, and get rid of the security threat at western Rwandan border (Prunier, 2003). As the war progressed, Rwanda and Uganda supported creation of a Congolese rebel movement (AFDL) which at the beginning was mainly composed of Congolese who participated in Rwandan war under RPF/A. The integration of a Congolese rebel group served not only to curtail allegations of an aggression when it became clear that it was possible change power in Kinshasa and get rid of the security thereat once for all (Arimatsu, 2012) but also it was a good opportunity for the Congolese of Rwandan origin to claim back their citizen rights (Fahey, 2011; Ndikumana & Emizet, 2005). This war ended up chasing Mobutu regime from power in 1997 (IBP, 2011; Mamdani, 2001) but due to Congo vast territory, former Rwandan armed forces were not annihilated (Spittaels & Hilgert, 2008). However, after just one year, the new power in Kinshasa became inimical to Rwanda and Uganda and a new war ensued (Prunier, 2009). That second war termed "the World War of Africa" or "Great Congo war" officially ended in 2003 with the mediation of the international community in Sun City, South Africa. It was alleged that different warring parties in that war used the mineral resources that are abundantly available in eastern DRC to finance their war operations (Pourtier, 2012). After the international armed conflict officially ended, a number of warlords who have participated in the great Congo war formed rebel movements that perpetuated war operations in eastern part of DRC and financed their operations by illicit trade of natural

resources especially columbite-tantalite, known in the region as “coltan” (Lalji, 2007; Mantz, 2008; Spittaels & Hilgert, 2008)

3.2.1 Rwanda in the first Congo war

When Rwanda decided to take the matter in its own hands, with the support of Uganda and later of AFDL, attacked Congo with the purpose of forcibly repatriating Rwandan civilian refugees, destroying training camps of former Rwandan army that was preparing to attack Rwanda and ultimately to change the power in Kinshasa for a friendlier one (Nzongola-Ntalaja, 2002). This is what happened when almost all Rwandan refugees in Congo were repatriated, the military threat against Rwanda was sensibly minimized and Mobutu was chased from power whereby Laurent Désiré Kabila, an ally rebel leader became president of DRC in 1997 (Beswick, 2009).

As the former rebel movement did not have enough human resources and expertise in some areas to run the country, some foreigners including Rwandans were given strategic posts within the newly formed DRC government either as advisors or as public servants (ICG, 2001a). This is the case of General James Kabarebe current Rwandan minister of Defense- at that time Colonel (known in Congo as James Kabare), a Rwandan who occupied the post of the DRC Army General Chief of Staff until 1998 (ICG, 1999). The presence of foreigners in strategic post started causing lack of trust among nationals and slowed integration of former Mobutu supporters. Facing pressure of some Congolese who were viewing his army as a foreign occupying force due to a considerable number of foreigners and Congolese of Rwandan origin, president Kabila started marginalizing Kinyarwanda speaking elements of his army and this caused mutiny in eastern provinces where majority of them were coming from (Clark, 2001a). President Kabila was pulled on both side by the need of uniting his country on the one hand and

satisfying the requests and interests of allies who made him president on another (ICG, 1999). He seemingly opted to please his people at the expense of his allies and got into trouble from the latter. In July 1998, disagreements with allies increased and he started replacing Kinyarwanda speaking officials of the army with former Mobutu military officers and foreign advisors and public servants with nationals (Hilsum, 1998). In retaliation, his former allies, Rwanda and Uganda again supported the creation of armed rebellion in Eastern DRC (ICG, 2000a). This war degenerated into one of the worst war in terms of casualties in post-World War II era (Ormhaug, Meir, & Hernes, 2009).

3.2.2 The second/great Congo war

After one year in power, the allies of President Laurent Kabila were disillusioned. His intention to monopolize power was becoming obvious (Nzongola-Ntalaja, 2002). Rwanda and Uganda growing dissatisfied with Kabila style of government supported the creation of a rebel movement Rally for Congolese Democracy (RCD) that started a war by seizing cities of Goma, Bukavu, Uvira and Kisangani in the first days of their rebellion (Nzongola-Ntalaja, 2002). Rwandan forces led by General James Kabarebe, one week after his removal from the post of general chief of staff of Congolese armed forces, carried out an airlifted operation in Kitona, in the West of Kinshasa at more than 2,000km from the Rwandan border (Stejskal, 2013) in attempt to topple President Kabila or at least to divert the attention of DRC forces to western Front while rebel forces are progressing towards Kinshasa (French, 1998). This western battle front prompted the intervention of Angola on the side of President Kabila that prevented Rwandan special forces to reach Kinshasa (Stejskal, 2013) while infiltration in Kinshasa were managed with the support of Zimbabwe forces (Reyntjens, 1999). Other countries such as Namibia, Chad, Libya and Sudan sent troops to support President Kabila's government forces (Clark, 2001a).

The French speaking countries in Central Africa condemned the attack on DRC sovereignty (Reyntjens, 1999). The anti-government forces were composed of rebel movement formed in Kivu Provinces and were supported by armed forces of Rwanda, Uganda and Burundi (Arimatsu, 2012). In total, more than 10 African countries were directly involved in this war (Bernarding, Guesnet, & Muller-Kone, 2015; Reyntjens, 1999).

The intervention of foreign forces on the side of the Kabila government managed to stop the progression of hostile forces and the stalemate was reached in March 1999 (Arimatsu & Mistry, 2012; ICG, 2002, 2003b). This stalemate led to Lusaka peace negotiations which concluded with a cease fire agreement and belligerents agreed to stay in the territories already occupied until the final peace agreement is reached and also agreed on the deployment of a UN observer force (ICG, 2000a).

After it became clear that Kabila could no longer be chased from power by force, RCD started having internal disagreements on its future strategy and on its reinforcement as a political movement by integrating former Mobutu officers. This was a critical need in order to show the public that RCD is not exclusively a movement composed of Congolese of Rwandan origin, the fact that could play against it if it competed in elections (Stearns, 2012). The disagreements within the movement ended with the split of RCD into two factions : RCD-Kisangani later RCD-ML (Mouvement de Libération/Liberation Movement) led by Wamba dia Wamba and backed by Uganda that occupied the northeastern part bordering Uganda, and RCD-Goma led by Dr. Emile Ilunga supported by Rwanda and occupied the southeastern part of DRC (ICG, 2001b). RCD-Kisangani later moved its headquarters in Beni after it lost the city to RCD-Goma in a fierce battle.

This split had long lasting consequences on the activities of Rwanda in Congo in subsequent years.

Taking advantage of the long stalemate, Rwanda and Uganda fought two proxy wars in Kisangani alongside their backed rebel movements. This war not only destroyed infrastructure in Kisangani but also claimed Congolese civilian lives (ICG, 2001b). Tough some media reported that reasons for these proxy wars are related to both countries harboring dissidents from one another, research institutes and scholars suggest that the underlying reasons are diverse and include diverging strategies over overall Congo war and regional rivalries between Rwanda and Uganda and competition over access to rich natural resources in the occupied territory (ICG, 2000b, 2001b; Mcknight, 2015; SAIIA, 2000). The stalemate and the creation of factions within RCD facilitated belligerents from both sides to start exploitation of different natural resources present on the territory they occupied (Ndikumana & Emizet, 2005).

3.3 Resources plunder allegations against Rwanda

The Democratic Republic of Congo resources plunder and ensuing violence is the key background of the conflict minerals provision. Since the invasion of eastern DRC by ADFL rebels backed by Rwanda and Uganda in 1996, there was practically no peace. The war kept changing forms and belligerents (Kinniburgh, 2014; Laudati, 2013). Many scholars, human rights activists, NGOs and lobbyists argue that the perpetuation of this war has a direct correlation with the existence of abundant minerals and other natural resources on the Congo territory that allow warlords to enrich themselves at the expense of civilian lives (Larmer et al., 2013; Laudati, 2013). The trade of minerals from DR Congo is suspected to have started during the great Congo war 1998-2003 by the foreign occupying forces. Rwanda and Uganda were the main countries accused of pillaging

Congo wealth during this war (Maystadt et al., 2014). After the withdrawal of foreign forces from DR Congo territory, Rwanda was suspected to launder illicit Congo minerals or to serve as route of their illicit trade (ICJ, 2005).

Allegations related to the exploitation of DR Congo minerals can be put into three successive phases. The first phase corresponds with Rwandan occupation of eastern DRC (1998-2003). In this phase, it is alleged that Rwanda directly exploited DR Congo minerals and put appropriate structures in its military to coordinate and carry out this exercise. The second phase followed the withdrawal of Rwandan forces and used proxy armed groups as a strategy for the continuation of the lucrative mineral exploitation (2004-2006, 2012). The third phase that cohabitated with the second phase came after the relative peace break and the strategy used was to use private companies in cross-border trade that majorly involved a black market of minerals from eastern DRC.

3.3.1 Allegations during Rwandan occupation of DRC territory (1999-2003)

The occupation of DRC by foreign forces started when the war reached a stalemate in March 1999 that resulted in the crystallization of frontline following the Lusaka ceasefire agreement. It is alleged that RCD Goma started venturing in accumulating financial resources by illegally awarding mining concessions contracts to different foreign companies (RAID, 2004). It is also alleged that Rwandan forces and RCD looted between 2,000 and 3,000 tons of cassiterite and between 1,000 and 1,500 tons of coltan at SOMINKI stores in Bukavu city at the beginning of the second Congo war between November 1998 and April 1999 and the loot was moved to Kigali (UNGoE, 2001, para. 33). In the meantime, Uganda is alleged to have looted timber and coffee beans in the territory it was occupying (para 34-35). In addition, Rwanda and RCD are said to have charged buyers of minerals an annual trading license fee of $15,000 and other

taxes for gate keeping (Human Rights Watch, 2005). When RCD-Goma realized that mineral exploitation was profitable during coltan boom in 2000, it created its own exploitation company known as SOMIGL (Société Minière des Grands Lacs) and levied US$10 per kg of coltan exported from the territory occupied by Rwanda and RCD Goma paid by other operators outside SOMIGL (Usanov, de Ridder, Auping, & Lingemann, 2013).

It was also reported that Rwanda put in place a sophisticated system to extract resources from occupied territory. According to the UN report, Rwanda earned $250 million in estimate as revenue from the trade in these minerals in the first 18 months of the war (UNGoE, 2001, para 130). It is also alleged that Rwanda put in place within the Rwandan Defense Forces (RDF) headquarters the Congo Desk in charge of coordinating the plunder of DRC natural resources and liaise with western buyers (UNGoE, 2002 par. 70). It is also alleged that Rwanda moved prisoners to Congo for mining activities and rewarded them with reduced sentences and some cash handouts and used its military helicopters to carry the minerals to Kigali (Usanov et al., 2013). The UN Group of Experts reported that Rwanda army owned two companies involved in trade of minerals exploited in Congo namely Rwanda Metals and Grands Lacs metals (UNGoE, 2001). In its addendum report of 2001, the Group of Experts accused Rwanda to use some odd strategy to maximize exploitation of minerals whereby Rwanda could not shy away from attacking Mai-Mai armed groups to occupy mines under their control. They reported that Rwandan army had clashes with pro government Mai-Mai militia where the Rwandan attacks directly targeted the control of coltan mining sites. These plunder allegations were reported not only by the UN Group of expert on DRC but were also echoed by NGOs such Human Rights Watch and Global Witness as well as think tanks such as the

International Crisis Group and different authors (Hintjens, 2006; Mcknight, 2015). It is alleged that during the second Congo war, Rwanda suddenly became a major exporter of gold and that its coltan exports shot up to around $20 million per month. This money is estimated to be enough to offset military operations in Congo at that time (UNGoE, 2001). However, figures of minerals taken from Congo do not appear anywhere in the annual export figures of Rwanda. .

Following the publication of the UN group of experts on Congo report, the UN Security Council in its debate of May 3rd, 2001 condemned Rwanda, Uganda and Burundi in strong terms for the illegal exploitation of Congo natural resources but fell short of taking enforceable sanctions against these countries. In this meeting that concluded with the adoption of the experts report, Rwandan Government was represented by the Presidential Special Envoy Mr. Patrick Mazimhaka who did not deny the content of the experts' allegations but refuted the report in its methodology as well as the unclear terms of reference of the experts (UNSC, 2001). The US, a permanent member of the UNSC did not do anything to cover up Rwanda that was considered to be its strategic ally in the African Great Lakes region. On January 24, 2003, The UN Security council condemned again the exploitation of Congo resources and emphasized that Rwanda was not cooperating with the investigation panel (UNSC, 2003a). In the same meeting, the Security Council castigated Rwanda to have failed to carry out its own investigation unlike Uganda that had taken steps to put in place an investigation commission to examine UN report allegations. On November 19th, 2003, the Security Council reiterated its condemnation on the continuing exploitation of DRC resources even after the withdrawal of Rwandan forces. In its January meeting, the UN Security Council had taken note of the accusations that Rwanda was putting in place mechanisms to sustain the exploitation

of Congo natural resources even after its withdrawal of forces. This time, the UN was lamenting that despite the withdrawal, Rwanda still had hands in the illegal exploitation of DRC resources. Rwanda rebutted that there is no way it could keep exploitation of mining sites without personnel on the field as it had completed the withdrawal of its forces from DRC territory (UNSC, 2003b). It is to be recalled that in 2003, the UN Security council took 7 resolutions on DRC and three of them explicitly condemned the exploitation and plunder of DRC resources (see e.g. UNSC, 2003a, 2003b, 2003c).

In 2002, the government of DRC filed a case against Rwanda, Uganda and Burundi in the International Court of Justice for aggression, occupation, causing death to DRC population and pillaging Congo's wealth. Uganda's case was heard on merit and Uganda lost the case and condemned to pay a colossal sum of money for damages (ICJ, 2005). Regarding Rwanda's case, the court declared not having jurisdiction because Rwanda did not make any declaration, unlike Uganda, accepting the jurisdiction of the International Court of Justice. Congo lost the case prima facie but had the case been heard on the merit, Rwanda would have suffered the same fate with Uganda because the facts of their cases were similar (ICJ, 2006b, 2006a). The content of the case against Uganda details how pillaging was systematically done and the findings of this case can be replicated to Rwanda even though the case against Rwanda was dismissed due to lack of jurisdiction. To conclude on this phase, there are substantial allegations about Rwanda and its allied armed movement RCD-Goma about massive plunder of natural resources especially minerals in the territory they were occupying between 1998 and 2003 at the time of withdrawal of Rwandan forces from DRC territory.

3.3.2 Allegations in the post-withdrawal period (2003-2007)

The second wave of allegations of the illegal exploitation of DRC minerals by Rwanda and other neighboring countries corresponds to the post-withdrawal of foreign forces from DRC territory and the creation of proxy armed movement dominated by Congolese generals of Rwandan origin. As earlier mentioned, the foreign forces left Congo territory by June 2003 (ICG, 2003a). As Eric Kajemba, one leader of civil society in eastern Congo explained in the columns of the Washington Post, the absence of government in many areas of eastern Congo have led to the takeover by armed groups (Raghavan, 2014). This was more so after the withdrawal of foreign occupying forces that left the gap in Congo as the Central government was so weak to fill the gap in the immediacy (ICG, 2004a). The number and names of armed groups prevailing in eastern DRC keep changing pursuant to opportune interests. Some armed groups such as FDLR and some Mai-Mai groups are there for the last 20 years whereas others are novel. In 2015, the Congo Research Group counted 69 active armed groups and militia operating in eastern Congo (CRG, 2015). Regarding Rwanda's role, the 2003 report to the UN Security Council by the group of experts on Congo accused Rwanda to have put in place a system based on its proxies in eastern DRC that would allow her to keep exploiting resources after the withdrawal. These accusation of Rwanda illicit trade of Congo mineral resources continued until recently (see e.g.UNGoE, 2011, 2012, 2015).

Many year after Rwandan withdrawal of its forces from DRC territory, accusations of illicit exploitation of DRC minerals continued to emerge especially in interim and final reports of the group of experts on Congo and reports from different NGOs and international organizations such as Human Rights Watch, Amnesty International, Global Witness, Enough project and International Crisis Group (Matthysen

& Montejano, 2013). They alleged that Rwanda was using its proxy rebel movements to continue its exploitation of Congo wealth (UNGoE, 2012). This was the case with Congrès National pour la Défense du Peuple (National Congress for the Defense of the People-CNDP) led by the renegade Generals Laurent Nkunda between 2004 and 2008 and Jean Bosco Ntaganda between 200 and 2008 as well as M23 rebel movement led by General Jean Bosco Ntaganda and General Sultani Makenga between 2011 and 2013 allegedly to protect business and investment interests of Kigali and allied businessmen as well to keep their political influence in DRC (Garrett & Mitchell, 2009; Spittaels & Hilgert, 2008; Stearns, 2012). When the UN Group of Experts continued systematically to accuse Rwanda of involvement in pillaging of Congo resources, more particularly after the leakage of the report about Rwanda's support to M23, Rwanda reacted by refusing entry visa to some members of the groups especially Steve Hege, the coordinator of the Group of Experts and refuted allegations contained in the 2012 report on abetting M23 (Charbonneau, 2013; MINAFFET, 2012). Subsequently, Rwanda casted doubt about some member of the Group of Experts who it accused of not being neutral and most of them had their mandate not renewed in subsequent rounds. This 2012 report about Rwandan support to M23 attracted international community outcry and many Rwandan bilateral donors such as the US, UK and Netherlands suspended their pledged aid where EU suspended US$90 million, UK US$34 million, SwedenUS$10 million, Germany US$26 million, the Netherlands cancelled $6 million support to the justice sector and the US cancelled $200,000 support to Rwandan military (Beswick, 2012; Muleefu, 2012).

3.3.3 Plunder allegations during the cross-border trade era (2007-2010)

The third wave of allegations of minerals plunder corresponds to the cross-border mineral trade period between Rwanda and DRC in the years preceding the adoption the

conflict minerals provision between 2006 and 2010. As it will be elaborated more in the chapter about mining sector in Rwanda, cross-border minerals trade was triggered by the liberalization of Rwandan mining sector in 2006 and the availability of cheap minerals across the border. As Rwanda was deemed more secure than eastern DRC, taking advantage of good business climate and better infrastructure compared to eastern DRC, various mining and mineral exporting companies elected their headquarters in Rwanda but their main activities were buying minerals from different selling counters in eastern DRC towns of Goma and Bukavu (Ochoa & Keenan, 2011; Usanov et al., 2013). At this time, there was no binding restriction on this trade as it respected the general principle of free trade. Although this trade represented free trade in minerals, it presented some problems related to the source of minerals. Firstly, this cross-border trade was not cordoned by the Kinshasa government as it largely involved rebel groups or rogue government military officers who acted against the public interests (Raj, 2011). Reports from institutions following up DRC situation pointed out that in many cases these minerals were sold or taxed by armed groups to finance their military operations that in most cases constituted violations of human rights and humanitarian law (GPO, 2010). Secondly, buying companies were not concerned by the prevailing situation at the mining sites where serious human right abuses such as child labor, child prostitution and sexual slavery were reported (Usanov et al., 2013). Their interest was to get as many minerals as possible at cheap price. Therefore, this trade presented a very big danger to DRC and regional security.

Cross-border minerals trade largely benefited armed groups in various ways. Either armed groups directly exploited minerals themselves or through structures supervised by them, or they taxed independent individuals who exploit these minerals

(Amnesty International &Global Withness, 2015; BSR, 2010; Kelly, 2014). In order to ensure sustainable income, armed groups put in place proto-governments that insured minimum public services in the occupied area (Maystadt et al., 2014) but at the same time, they committed unspeakable crimes against humanity as documented by different reports (Spittaels & Hilgert, 2008). In this way, cross-border trade crystalized the black market of minerals (Whitney, 2015).

Minerals trading companies registered in Rwanda owned mining concessions in Rwanda but they were not fully exploiting them as it was easy to get minerals from eastern Congo without much investment whereas exploiting their concessions in Rwanda would require heavy investment and other expenditure such as salaries and insurance for miners and other staff as well as preserving the environment around their concessions. This shift of attention towards minerals business with Congolese dealers resulted into delayed modernization of Rwandan mining sector that was envisaged in liberalization of the sector in 2006 and enshrined in business plans submitted during the process of acquisition of mining licenses (MINIFOM, 2010). However, there was no major incentive to coerce this companies to stop that business and concentrate on extracting minerals from their concessions.

Cross-border minerals trade was facilitated by the fact that Rwandan laws at that time provided that minerals processed at the rate of 30 % at least are considered to have originated from Rwanda (Usanov et al., 2013). Therefore, companies could import into Rwanda Congo mineral ore with the concentration of 40%-50% and process it to 70%-80%, to reach the acceptable standard for mineral ore export quality of at least 65% (Garrett & Mitchell, 2009; Long, Gosen, Foley, & Cordier, 2012). The cross border trade was also facilitated by the fact that Rwanda applied no taxes for minerals export whereas

Congo had that tax and this made Rwanda more competitive for mineral exporters. In addition, there are good transport infrastructure network linking eastern DRC and Rwanda (Garrett & Mitchell, 2009). In order to blur the origin of minerals, it is alleged that companies mixed minerals they bought from Congo with the quantities they got from their concessions in Rwanda and exported all the minerals as Rwandan minerals. However, they could not fully harmonize figures as reports indicate the difference between Rwandan mineral exports and mineral production and Rwandan authorities could not provide convincing explanations about this surplus between exploitation and export quantities (Bleischwitz et al., 2012).

3.4 The reaction of the international community

Since 2000, following the request of the Lusaka ceasefire that provided for the deployment of a UN observer mission between belligerents, the UN Security Council deployed the Congo observer mission (MONUC) by its resolution 1279 of November 30th to monitor the implementation of cease fire agreement, to support disengagement of troops and to serve as liaison between the belligerent sides (UNSC, 1999). The number of troops and the tasks to be performed by the mission kept changing in the last 16 years. The UN Security Council also put in place the Congo Committee pursuant resolution 1533 (2004) to oversee sanction measures imposed by the UN Security Council on Congo including the arms embargo, travel bans and assets freeze. The committee is assisted by the Group of experts that carry out investigations and issues reports twice a year. The group of experts has issued interim and a final reports every year and these reports have widely documented the illegal exploitation of Congo natural resources (UNGoE, 2001, 2015b). Almost all the reports of the group of expert on Congo finger pointed to Rwanda either as directly plundering Congo mineral resources or as a route for armed groups in

eastern Congo who illicitly traded in Congo minerals. Whenever the reports were presented to the UN Security Council, the latter approved the reports, condemned countries named in the reports including Rwanda, deplored the war in Congo in general and the ensuing humanitarian crisis and the exploitation of Democratic Republic of Congo resources in particular.

Realizing that the exploitation of natural resources fuel violence, the UN Security Council took some measures against some individual warlords but stopped short to issue any sanction against countries named in the experts' reports (Bjurling, Ewing, Munje, & Purje, 2012; UNGoE, 2012b). However, the UN Security Council encouraged countries named in the reports to investigate these allegations and take measures to stop them and issue sanctions against any individual found responsible (UNSC, 2003b).

Likewise, the US administration also issued targeted sanctions against individuals who are accused of collaborating with armed groups to exploit minerals since 2006 and the list kept updated (NARA, 2006; White House- OPS, 2014). In the same year of 2006, the US government adopted a law, the Congo Relief, Security, and Democracy Promotion Act in a bid to contribute to peace and stability in Congo. This law did not bear any significant impact on the eastern Congo situation (GPO, 2007). After this law could not change the situation as expected, different international humanitarian NGOs and Human rights organizations operating in the region launched a vast campaign to salvage Congo situation (GAO, 2015b). This campaign was multipronged as it encompassed using international media and other platforms of communication to make known the humanitarian crisis in Congo and linking it with the minerals that are used to manufacture popular gadgets in the daily use by different consumers in the West but also to lobby different personalities in the US Congress and Administration regulate the trade of

minerals that were thought to be the motivation of warlords in eastern Congo to wage more wars (Woody, 2012). This campaign was given impetus by some congressmen who accepted to sponsor bills that would regulate trade of the culprit minerals. These bills were the ones that later formed section 1502.

3.5 Rwandan reaction

As mentioned above, Rwanda did not openly contest allegations of having taken any minerals resources during its occupation of the eastern DRC. Instead, Rwanda criticized the methodology used by the investigation team of experts to rich its conclusion and deplored that Rwanda was not given enough opportunity to give its version before the final report was issued (UNSC, 2003a). The same for the other phases of exploitation of DRC resources as we discussed them, the UN group of experts and other researchers evidence alluded that Rwanda had a certain control on some armed groups operating in Congo and their warlords such as CNDP led by General Laurent Nkunda (Spittaels & Hilgert, 2008; Stearns, 2012). Rwanda's argument in regards to trading DRC minerals across the border was that the cross-border trade is natural flow of business between neighboring countries and follow suite of what has happed for many years that pre-existed the Congo war, thus it should not be taken as illegal as no legal norm proscribed it (Ochoa & Keenan, 2011). In reaction to reports that Rwanda abetted M23 and had business interests with it, Rwanda issued a rebuttal to the UNGoE report that addressed all the accusations leveled against it and also claimed that the group of expert did not consult Rwanda before publishing the report (MINAFFET, 2012). In subsequent days, four senior officers of the Rwandan Defense Forces who were suspected to be involved in illegal trade in eastern Congo were arrested in January 2012 as a sign of the government to disassociate itself with reprehensible individual actions related to trading in Congo

minerals (Reyntjens, 2015). It is after the adoption of section 1502 within Dodd-Frank Act that Rwanda devised a number of policy responses that at the same time aimed at streamlining mining operations and trade of minerals in Rwanda by illegalizing import of uncertified minerals and bringing back Rwanda registered companies to focus on their concessions and implement their business plans in order to build a strong Rwandan mining sector. These policy responses are discussed in details in chapter six.

3.6 Consequences of war and mineral resources plunder

The military occupation by foreign forces and later by different armed groups, their exploitation of natural resources, extortion and taxation of local businesses were not separated with violence and violation of Congolese citizens' rights and freedoms. In some cases, gross violations of international law that are tantamount to war crimes and crimes against humanity were reported (ICG, 2004b; Usanov et al., 2013). Though the violence cannot entirely be attributed to the greed of minerals and other natural resources, the competition among different armed groups to occupy zones rich in minerals, use of child labor, forced labor, sex slavery and inhumane conditions on mining sites were reported in different areas where these armed groups were occupying (Kelly, 2014; UNGoE, 2014; Whitman, 2010). The war and violence in Congo became profitable for warlords that different mechanisms put in place to integrate them within the national army failed especially when they were told to leave eastern part DRC for deployment in other parts of Congo. This is the case of CNDP elements that resisted "brassage" process and proposed staying in Kivu provinces as the condition for their integration within the national army (Spittaels & Hilgert, 2008; UNGoE, 2011). The many interpreted this as the strategy of their masters to keep hold of different interests and investments they

illegally had made during occupation period. For example, M23 claims in 2011 were based on unsatisfied conditions posed by CNDP in 2004 (Usanov et al., 2013).

The presence of abundant natural resources and their use by different armed groups to finance their military activities and violence led different lobbyists and human rights activists to change their Congo campaign strategy from the tradition causes of internal armed conflict to the theory of greed for natural resources that some scholars have earlier developed as the source and motivation of war. The campaign particularly singled out four minerals that are abundant in eastern Congo (Hutcheon, 2009; Prendergast, 2009; Raj, 2011). The four culprit minerals are tin, tantalum, tungsten and gold. Tantalum was massively exploited during the second Congo war as this period corresponded with its international market boom that started in 2000s and its prices are generally higher than those of tin and tungsten (Usanov et al., 2013). Gold is particular in the sense that it can be transported in small quantities thus easy to smuggle and not easily traceable unlike tin, tantalum and tungsten, and has fungible properties , thus can be used for exchange of goods such as arms and ammunitions (Pact, 2015). The campaign against the use of the four minerals used to manufacture different hi-tech consumer goods used on daily basis in western countries started in 2007 and culminated in the conflict minerals provision that was adopted in 2010 (Whitney, 2015; Woody, 2012). This provision not only targeted the eastern Congo but also neighboring countries especially Rwanda that also produces the same minerals as eastern Congo and has been accused of taking part in wars and minerals plunder that characterized Congo wars.

3.7. Conclusion

To sum up, Rwanda had an active role in changing Mobutu regime in 1997 and putting in place president Laurent Desire Kabila. In 1998, Rwanda once again attempted to remove Kabila from power and this resulted into the Great Congo war. It is during the stalemate of this war that allegations of massive plunder of Congo resources by Rwanda emerged. After the peace agreement concluded in Sun City South Africa, that ordered a withdrawal of foreign forces, Rwanda was accused to have set up a system of proxy armed groups that would help to keep exploiting Congo minerals and safeguard investments made during occupation. After Rwanda had liberalized its mining sector, once again accusations came up that Rwanda based mining companies were orchestrating the plunder of Congo minerals by dealing with Congo based armed groups in cross-border trade.

Since 1996 when the second Congo war started, it is estimated that more than 5,4 million Congolese civilians died in war or as a direct consequence of war and violence that has taken more than 20 is believed to be fueled by the existence of huge reserved of minerals. To exploit these reserves, armed groups use child labor, and other inhumane conditions in mining sites. In addition widespread rape and sexual slavery have been documented in areas occupied by armed groups and in mining zones.

After realizing that the profitable minerals trade and the insatiable demand of these minerals by western hi-tech companies contribute to this crisis, in the framework of stopping this humanitarian crisis that different NGOs and the humanitarian lobby group launched a campaign that resulted in different bills in US Congress to regulate trade of these minerals. The e US legislator listened to the voice of Congo campaigners and adopted the law that had serious consequence on mining activities in eastern Congo and its neighboring countries more particularly Rwanda that shares the same geological

features and endowments with eastern Congo. The invasion and occupation of eastern Congo by Rwanda and its allies and the allegations of massive plunder of Congo mineral resources during the occupation and after the withdrawal the support to armed groups to pillage Congo resources constitute the raison d'être of this conflict minerals provision.

The conflict mineral provision that will be discussed in details in the next chapter is based on the economic calculation that depriving eastern DRC actors involved in mining as well as Rwanda that relies on the same minerals would force Rwanda to withdraw its support and collaboration with Congo armed group actors in eastern DRC and to control its borders with DRC and this would help to starve armed groups of the needed finance and bring them to comply with existing stabilization scheme for eastern DRC.

This chapter showed the context that triggered the economic sanction levied against DRC and its neighboring countries targeting their international trade of tin, tantalum, tungsten and gold. However, the Rwandan role in eastern DRC and the selection of minerals to target alludes that Rwanda is also the main target in this sanction. Thus, the behavior of Rwanda vis-à-vis Dodd-Frank Act is detrimental in the effectiveness of conflict minerals provision.

CHAPTER 4: THE CONFLICT MINERALS PROVISION: AN ECONOMIC SANCTION TO SALVAGE CONGO SITUATION

On July 21st, 2010, President Barak Obama signed into law the Wall Street Reform and Consumer Protection Act, hereinafter Dodd-Frank Act, whose section 1502 created conflict minerals provision. This provision requires companies that use tin, tantalum, tungsten and gold in their final products to disclose to the Securities and Exchange Commission whether they or their suppliers sourced these minerals from DRC or its neighboring countries. It also creates obligation to DRC and its surrounding countries to adopt behavior that facilitate the eradication of black market of the designated minerals. To achieve its goal, the US used sticks and carrots on these countries depending on their vulnerability to these minerals. In this sense, scholars have identified section 1502 of Dodd-Frank as an economic sanction to bend these countries to comply with its requirement.

The purpose of this chapter is to present to the reader ins and outs of this provision. From the theoretical framework discussed in chapter 2, this chapter presents a specific case of economic sanction to Rwanda and other countries in the region affected by section 1502 of Dodd-Frank Act. This chapter has an important role in this thesis as it bridges between the theory and the specific case of Rwanda that is discussed in chapters 5 and 6. It also connects chapter 2 on the alleged role of Rwanda in Congo mineral resources plunder and the behavior of Rwanda in the aftermath of adoption of Dodd-Frank Act (Maclin, Kelly, Perks, Vinck, & Pham, 2017).

This chapter will elaborate in its first section on conflict minerals and their use; the second section discusses the legislative history of section 1502 of the Dodd-Frank Act; the third section analyzes different paragraphs of Section 1502; the fourth section

four discusses the effects of conflict minerals provision on different categories namely DRC, the US administration, companies, other stakeholders and adjoining parties; and the last section discusses the nature of conflict minerals provision.

4.1 What are the conflict minerals?

According to Section 1502 of Dodd-Frank Act, "the term ``conflict mineral'' means: (A) columbite-tantalite (coltan), cassiterite, gold, wolframite, or their derivatives; or (B) any other mineral or its derivatives determined by the Secretary of State to be financing conflict in the Democratic Republic of the Congo or an adjoining country" (par. e.4). These four minerals became famous because they were widely traded by belligerents in Congo wars and Congo observers agree that their trade played a big role in perpetuating war and violence eastern DRC (Keenan, 2014). It is noteworthy mentioning that these minerals are not the only minerals abundantly available in DRC and are not even the main minerals exported by this country (Yager, 2016). Likewise, these minerals are not exclusively mined from this region as they are also available in other parts of the world. Before the widespread use of the term "conflict minerals" in the media, the closely related term "conflict resources" was used especially in relation to conflict diamond from Sierra Leone and Angola conflicts (see for example Olsson, 2007; Samset, 2002; Ylönen, 2012). The term conflict minerals was first used in Brownback bill on Conflict Minerals Trade Act whose parts were later incorporated in Section 1502 of Dodd-Frank Act (GPO, 2009a). According to the website www.sourceintelligence.com that claims to be specialized in issues of transparency and visibility to the supply chain, by 2010, around

35% of mineral profits in DRC goes to armed groups and constitute 75% of armed groups' source of revenue[10].

According to Soto-viruet et al. (2013), tantalum is the most important mineral among the four conflict minerals due to the share of the African Great Lakes Region in world supply. Tantalum is a "refractory metal ductile, easily fabricated and resistant to corrosion by acids and a good conduct of heat and electricity" (p.7). Electronic companies need tantalum for capacitors used in electronic circuit of different hi-tech equipment such as GPS systems, mobile phones, laptop computers, DVD players, video game devices, recorders, scanners, cameras, iPod and so on. Tantalum gained reputation from 1990s because it helps electronic equipment manufacturers to achieve the miniaturization of the devices as it allows to have smaller and smaller capacitors. Electronic industries consume between 50%-60% of tantalum whereas the metallurgical industry consumes 20%. The capacitors take 40% of the tantalum consumed by electronic industries and are used as automotive for electronics, cellular phones, hard disc drives, light emitting diodes, computers, medical equipment, etc. Tantalum is also used in metallurgical industries to manufacture super alloys needed in aerospace components like engine blades and land-based gas turbines. The metallurgical use also include production of sheets, plates, welded tubes, rods and wires (Soto-viruet et al., 2013, p. 8).

In 2011, Rwanda and DRC produced 42% of the World Tantalum (Usanov et al., 2013). According to the US Geological Survey's mineral commodity summary, in 2014 and 2015, Rwanda was the largest producer of tantalum with around 50% of the world production while DRC accounted for 17% (USGS, 2015). Rwanda replaced Australia as

[10] https://www.sourceintelligence.com/what-are-conflict-minerals/

the leading producer of tantalum in 2010 when Australia closed its mines due to less competitiveness caused by expensive labor, stringent environmental regulations and the nature of deposits enclosed in deep hard rock (Geoscience Australia, 2013; see also Emery, 2013) compared to African Great Lakes' columbite-tantalite that is associated with tin in malleable rock (Hutcheon, 2009). However, Australia, Brazil and Canada remain the world leading countries in terms of tantalum reserves. The US also had big reserves but are considered to be uneconomical as of 2015 (USGS, 2016a). This means that the Great Lakes Region is strategic in as far as the world supply of this metal is concerned.

Tantalum can be substituted in its different applications by different other minerals but usually with less effectiveness (USGS, 2016a). The main processing plants of tantalum are located in the Netherlands, Australia, Germany, Austria, US, China and Japan (Soto-viruet et al., 2013).

Regarding cassiterite, it is transformed into tin that has different scientific and industrial applications. Tin products have the properties of being corrosion resistant, solderability and weldability (JFE, n.d.). The main tin product is the tin solder considered to be a greener alternative to the lead solders used in different equipment especially in circuit boards (Hegen & Richardson, 2009; SEMI, 2011). According to the International Tin Research Institute (ITRI), solders take 43.5% of tin products share, whereas chemical use take 15.5%, tin plates used to make various containers such as food and beverage cans consume 14.5% of world tin whereas the rest is used for other applications such as brass and bronze, float glass, lead-acid batteries and others (ITRI, 2015). Rwanda and DRC are among top 15 world producer of tin but their combined annual production output is slightly above 3% (USGS, 2015). This means that the supply from the central African

region is negligible to the world market. Moreover, there are many substitute to tin in its different applications (Mallory, 1990). The main producers of tin ore are China, Indonesia, Myanmar, Peru and Bolivia (ITRI, 2016).

Regarding tungsten, it is produced from wolframite and is used to manufacture integrated circuit as interconnected device. It is also used in manufacturing wires, light bulbs, cathode ray tubes, electric lamps and LCD screens (Hegen & Richardson, 2009). Tungsten is also used to manufacture vibrating motors of hi-tech devices such cell phones. The classic use of tungsten metal is to harden steel, and to manufacture armor piercing ammunitions (USGS, 2016b). According to the 2015 US Geological Survey report, Rwanda was ranked 8th in top world producers of tungsten but its share was less than 1%. DRC produced almost similar quantities with Rwanda (USGS, 2015).

Regarding gold, though some countries concerned by conflict minerals produce some gold, no country in the region is among the top ten world gold producers. DRC, Tanzania, and Burundi produce a certain amount of gold (USGS, 2013a, USGS, 2013b) but due to difficulties in traceability of gold and being a luxury commodity that can be transported in small quantities, thus prone to smuggling, it is not easy to know the exact amount of gold quantities produced in the region (Arikan, Reinecke, Spence, & Morrell, 2015).

The use of the four minerals by companies that are eager to source cheap raw materials in order to manufacture devices that are affordable on the market led to sourcing in conflict prone areas often controlled by warlords who commit violations of human rights and humanitarian law (Prendergast, 2009). The campaign led by Global Witness and Enough Project persuaded US policy makers to start thinking about how to foil this

trade (Hutcheon, 2009) and this led to the adoption of conflict minerals provision by the US Congress.

4.2 Legislative history of Section 1502 of Dodd-Frank Act on conflict minerals

As explained in the previous chapter, DRC was marred by incessant armed conflict and violence. Though the root causes of this conflict might be different (UNECA, 2015), it is widely agreed among scholars and observers that the abundance of minerals in DRC especially in two Kivu provinces play a big role in sustaining these conflicts and violence (Fahey, 2011; Lalji, 2007; K. Vlassenroot & Raeymaekers, 2009).

After the great Congo war of 1996 to 2003 and the subsequent withdrawal of foreign forces, various armed groups took over in Eastern DRC[11] and took advantage of vast natural resources to finance their wars (Williams, 2013). This complicated the stabilization of the region and aggravated humanitarian crisis. In 2006, president George Bush issued the Executive Order No.13413 blocking property of certain persons contributing to the conflict in DRC (National Archives and Records Administrarion [NARA], 2006). This executive order specifically targeted 7 persons heading either armed groups or commercial and transport companies involved in illicit trading of DRC natural resources[12]. This executive order was amended in 2014 by another order of President Barak Obama with the purpose of "taking additional steps to address the national emergency with respect to the conflict in the Democratic Republic of the Congo"

[11] According to the mapping carried out by In 2015, Congo Research Group, non-profit research project dedicated to understanding the violence that affects millions of Congolese there were 69 different armed groups operating in North and south Kivu in October 2015. A big part of them is composed by different factions of Mai-Mai militias (Congo Research Group, 2015).

[12] This order available at http://www.gpo.gov/fdsys/browse/collection.action?collectionCode=FR targeted 3 rebel leaders namely Laurent Nkunda (CNDP), Ignace Murwanashyaka (FDLR) and Khawa Panda Mandro (PUSIC) as well as 4 businessmen namely Viktor Anatolijevitch Bout (Russia), Sanjivan Singh Ruprah (India), Dimitri Igorevich Popov (Ukraine) and Douglas Mpamo (Rwanda).

(White House- OPS, 2014, p. 1). The new amendments constituted a new step in so far as they include among the target of the ban American individuals or companies that have commercial or financial ties with armed groups operating in DRC and froze their assets (White House- OPS, 2014, Sect. 1). These amendments of the executive order come to reinforce the conflict minerals provision.

In 2007, the US government passed the Democratic Republic of the Congo Relief, Security, and Democracy Promotion Act (US Government Publishing Office [GPO], 2007) that among other issues to be dealt with were natural resources. In its title I related to bilateral action to address urgent needs in DRC, Section 102 (8), the US government committed itself to ensure that DRC becomes an accountable state that uses and manages its abundant and diverse natural resources in a transparent manner (GPO, 2007). At this time already, the US Congress understood that transparency in the use and management of natural resources was crucial to security and success of peace processes that have started in Congo in early 2000s. The term DRC used in this law was used in a comprehensive way in the sense that it includes not only the central government but also all domestic actors in DRC peace process. In section 201 of title II related to multilateral action to address urgent needs in DRC, in its paragraph related to the US policy towards DRC in the United Nations Security Council (UNSC), this law commits the US government to strengthen the capacity of MONUC (MONUSCO since 2010) and providing it "with authority and resources needed to effectively monitor arms trafficking and natural resources exploitation at key border post and airfield in eastern parts of DRC" (par. 3.E); to allow for more "effective protection and monitoring of natural resources in DRC, especially in eastern part of the country and for public disclosure and independent auditing of natural resource revenues to help ensure transparent and accountable

management of these revenues" (GPO, 2007, sect. 201). However, MONUC that was supposed not only to oversee the implementation of terms of peace agreements but also to ensure that DRC natural resources are not illegally taken out of borders, could not prevent the proliferation of armed groups in eastern DRC and their illicit trade of natural resources to finance their military activities (Autesserre, 2015; Reynaert, 2011; Swart, 2011).

As insecurity and violence continued in Eastern DRC caused by the multiplication of armed rebel groups and militias (Narine, 2013), a strong DRC lobby led by individuals and non-governmental organizations (NGOs) supported by companies, civil liberty and lobby groups such as the Centre for American Progress (the parent organization of Enough Project), Human Rights Watch, Hewlett Packard, International Labor Rights Forum and Information Technology Industry Council started a strong advocacy for a law on transparency in the trade of minerals from DRC (Taylor, 2015). After different US congressmen visited DRC, and after various Enough Project reports linked hi-tech consumer goods used in daily life of people from developed countries and the humanitarian crisis in DRC by subtly criminalizing different minerals' components sourced in this region (Prendergast, 2009), two parallel bills started in both chambers of the US Congress and all died in specialized commissions where they were referred to, but they laid a strong foundation on which Dodd-Frank was built (Whitney, 2015). In Fact, Section 1502 of Dodd-Frank Act is the combination of the two bills.

The first bill was introduced in the US Senate in 2008 by Senator Sam Brownback who proposed the ban on the US market of minerals that were used to finance wars and violence in DRC (Whitney, 2015). This bill was rejected as it was proposing a total ban of commodities contrary to international trade treaties and principles. After the failure of

the first attempt, in 2009, Senator Brownback co-sponsored by Senator Dick Durbin and Senator Russ Feingold introduced a second bill that proposed a disclosure instead of a ban (Whitney, 2015, see also Narine, 2013; Seitz, 2012; Taylor, 2015). Brownback and Durbin have earlier traveled together in DRC and interviewed different people about what is happening in the region. Their initiative was supported by Enough project, the anti-genocide project of the Centre for American Progress, and Global Witness, a campaign to halt the abusive exploitation of natural resources (see Enough Project & Global Witness, 2009). The aim of this bill was to introduce transparency in minerals supply chain used in various electronic devices. The bill tasked electronic devices manufacturing companies to report to the Securities and Exchange Commission (SEC) whether their suppliers sourced the criminalized minerals namely tin, tantalum and tungsten they used to manufacture different components from DRC or her neighboring countries, and if this sourcing of minerals did not benefit armed groups that commit human rights and humanitarian violations in DRC (GPO, 2009b). This bill could not get approved in the senate committee it was referred to.

In the House of Representatives in the same year of 2009, four congressmen namely Mr. Jim McDermott, Mr. Frank Rudolf Wolf, Mr. Barney Frank and Mr. Don Payne also introduced another bill that aimed at solving the DRC conflict and violence by introducing transparency in the trade of minerals deemed to finance this conflict (Seay, 2012). They termed their bill as "Conflict Minerals Trade Act". They believed that by drying up the source of income of warlords, it would make a big blow on armed groups and force them to take part in DDRRR program implemented by MONUC and later MONUSCO. Mr. McDermott had a good knowledge of central Africa region in general and DRC in particular as he served as a medical doctor in the region in 1980s and had

traveled to DRC in 2007 to conduct interviews with victims of rape and he had a strong sentiment about DRC crisis (Taylor, 2015).

The sponsors of this bill motivated their action by the rampant humanitarian crisis in eastern DRC and the failure of the existing tools to remedy it. They reiterated that the illicit trade of minerals by armed groups not only fuel wars and violence, rob Congolese of their valuable resources but also undermines efforts of DRC government and its partners to ensure security and peace on its territory (Narine, 2013). They referred to the 2008 report of the International Rescue Committee that estimated the toll of DRC conflict victims at 5.4 million deaths caused by DRC wars and subsequent humanitarian crisis since 1998 and around 45,000 deaths every months by 2009. They also referred to reports of rampant rape as a tool of combat touching thousands of women and girls in DRC, and the use of child soldiers on front line or as bonded sex slaves (GPO, 2009, sec. 2 par.4-6). Other instruments referred to include the 2007 Government Accountability Office report on the role of trade of smuggled minerals in fueling armed conflicts and financing militias and different armed groups including foreign rebel movements based on DRC territory; the December 2008 report of the UN Group of Expert on DRC that confirmed that armed groups in Eastern DRC were using the 3TG to finance their war activities and the United Nations Security Council (UNSC) resolution 1857 of December 22nd, 2008 that extended the existing sanctions on DRC and levied targeted sanctions against individuals and groups of individuals involved in the illicit exploitation and trade of DRC natural resources (GPO, 2009, sec. par. 7-9). This UNSC resolution 1857 requested all UN member states to ensure that companies under their regulation using minerals sourced from DRC to exercise due diligence on their suppliers including to know from which mines the sourced minerals were extracted, who controls or benefits from the proceeds of

this minerals, and to refrain from buying minerals coming from or suspected to come from deposits controlled or taxed by armed groups (GPO, 2009, sec.2, par. 9; see also UN Security Council, 2008).

The sponsors of this bill justified it as a measure to limit trade, thus tantamount to economic sanction, basing the right of the US to restrict importation of goods that are harmful to people in DRC including the 3Ts and their derivatives. They argued that this economic restriction is in conformity with the provisions of Article XX.a. of the General Agreement on Tariffs and Trade (GATT) 1994 that aims at protecting public morals (GPO, 2009, sec2, par. 2.14). As Buggenhoudt (2014) discussed it in details in a hypothetical case, this restriction has the same rationale as the Tom Lantos Block Jade Act that "prohibited imports into US of jewelries containing rubies and jadeites mined or extracted from Myanmar regardless of whether they were substantially transformed in a third country" (p. 14).

In addition to restricting trade of 3Ts, McDermott bill proposed that the US President, the Secretaries of State, Defense and Commerce as well as the United States Agency for International development (USAID) be tasked to implement this law by using incentives and penalties to increase stakeholders compliance. The US government was to assist DRC in establishing transparency mechanisms by building strong governance institutions. The bill also provided for punitive measures to transgressors (GPO, 2009, sec. 9). The Department of State was required to include the progress of the implementation of this law as a section in the annual US human rights report on DRC. In addition, provisions of this bill were linked to the requirements of the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas. The bill required the US government to include efforts of

companies under this law in the annual report to OECD where it would be reported if companies that source their minerals in DRC financed or not war and violence in this country (sec. 4, e).

The difference between this bill and Section 1502 of Dodd-Frank Act is that it was only encouraging trading companies to cooperate in boycotting black market conflict minerals whereas Dodd-Frank requires companies to comply. The bill was emphasizing the fact that companies have the capacity to influence the situation in DRC by carrying out due diligence over their suppliers, to trace the origin of the minerals and that they have means to support the certification process of the minerals. Another difference was that this bill was exclusively circumscribed to DRC territory as its scope of application. Unlike the bill introduced by senators, this bill provided for the end of the measures if the President is convinced that there is no more armed group in the region that is using the identified minerals in any way to finance their war and that there is an effective framework to regulate and monitor the trade of conflict minerals to prevent armed groups to use them to perpetuate war and violence in DRC. In this case, the president could ask the congress to terminate of this law.

Despite the strong support to this McDermott bill by DRC lobby groups, NGOs and the media, it could not be voted in the Committee on Foreign Affairs and the Committee on Ways and Means and Armed Services it was referred to (Whitney, 2015). After failing to pass in the Congressional committees, some of its paragraphs were later incorporated in Section 1502 of the Dodd-Frank Act.

The introduction of these two conflict mineral bills, their subsequent debates in the Congressional Committees were accompanied by a wide media coverage and different correspondences and communication about conflict minerals in order to

publicize the term and engrave it in the minds of the public. In this regard, Senator Russ Feingold wrote an open letter to Secretary of State Hilary Clinton about DRC situation and Conflict minerals (Woody, 2012). He as well made different statements, issued press releases on the situation in DRC and African Great Lakes region. Some few years after in 2013, Secretary Kerry appointed him as US Special envoy in Great Lakes Region where he was in charge among other things to assist in the eradication of armed groups operating in eastern DRC, the culprits in conflict minerals provision. In the same vein, Senators Brownback and Durbin also made different statements, press conferences and issued press releases on the same issue (Taylor, 2015). During the congress debate on conflict minerals bills, State Secretary Hillary Clinton made a tour to Africa's Great lakes region where she visited camps of internally displaced persons in eastern DRC, met with victims of rape and sexual violence and made a statement that the US government will leave no stone unturned to fight sexual violence and other human rights abuses committed by belligerents in DRC wars (Woody, 2012). All the initiatives culminated in the adoption of section 1502 of the Dodd-Frank and the promulgation by President Obama some few weeks after adoption.

4.3 What does the Conflict Minerals provision say?

After the two bills died in 2009, during the debate of the Wall Street Reform and Consumer protection Bill, the Senate included parts of the Brownback bill in the final version of Dodd-Frank Wall Act. The House of Representatives version (H.R.4174) of Dodd-Frank Act sent to the Senate did not contain any provision on conflict minerals. Initially, Dodd-Frank Act was only meant to manage effects of the 2008 financial crisis. Section 1502 that was added during debates in the Senate introduced the disclosure requirement to SEC whether companies listed on US Stock Exchange market sourced tin,

tantalum, tungsten and gold and their derivatives in their products from DRC and/or its neighboring countries (Taylor, 2015). After the Senate added this section, a joint commission composed of members of both chambers of the Congress was put in place to finalize the bill. The joint commission agreed to maintain Section 1502 and fine-tuned it by including some elements from McDermott bill to make it more comprehensive.

Section 1502 introduced due diligence on the supply chain of minerals or their derivatives to ensure that revenues from designated minerals or their derivatives do not benefit armed groups in DRC or adjoining parties (Fed Register, 2014). Section 1502 of the Dodd-Frank Act introduced different measures to ensure effectiveness of the conflict minerals provision where the US government was mandated by the Congress to (a) develop a strategy to address conflict minerals; (b) to increase support to investigations of the United Nations Group of Experts on DRC (UNGoE); (c) to elaborate maps of mining areas under the control of armed groups in eastern DRC; and (d) to issue guidelines to companies related to carrying out due diligence of their sourcing in minerals or derivatives. The USAID was mandated to expand the US efforts to improve conditions and livelihoods for communities in eastern DRC who are dependent upon mining. In its regular reviews, the Government accountability Office (GOA), an independent and nonpartisan agency that works for Congress was asked to evaluate adherence and effectiveness of the policy on humanitarian crisis in eastern DRC.

The following diagram shows the process of the conflict minerals provision requirement and compliance:

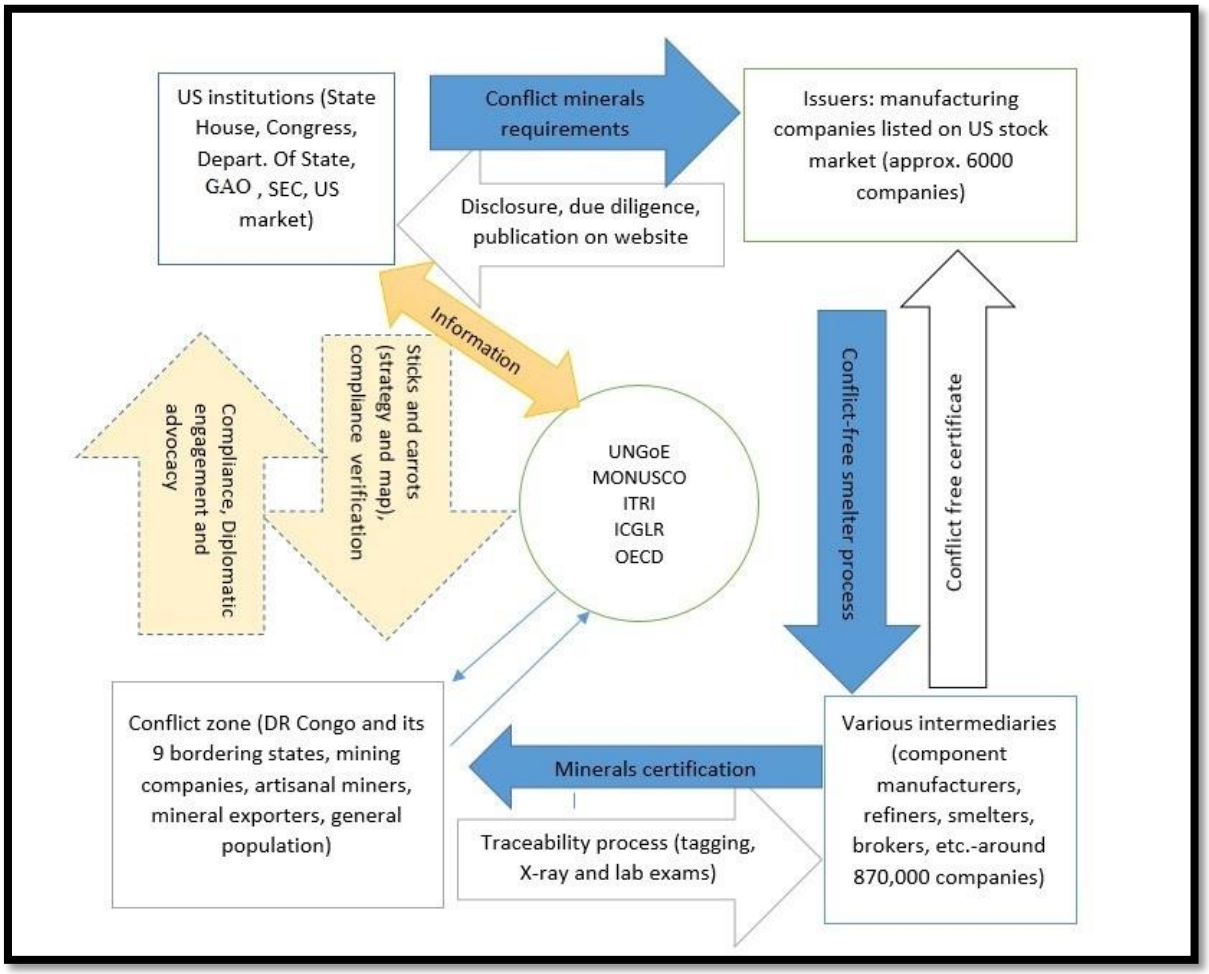

Figure 1: Dodd-Frank Section 1502 Flow Chart

Source: Own compilation

According to the above diagram, on the one hand the compliance process to the conflict minerals start with the requirement of the US administrative institutions that require companies under their supervision (issuers) to disclose the origin of the 3TG in their devices. In order for the issuers to know the origin of the minerals, issuers created the conflict smelter-free system whereby different suppliers, refiners and smelters are hold responsible of the minerals they smelter, refine or transform (Strickland, 2011; Young, 2015). The system award a conflict free certificate to the smelter that complies with the guidelines and standards set under this system. Smelters that did not adopt the

conflict free system are not allowed to supply to the issuers or their sub-contractors. The pressure on subcontractors, smelters and refiners leads them to also throw the burden of origin certification on shoulders of mining and exporting companies from producing states (Dam-de Jong, 2015; Owen, 2013; Strickland, 2011). In order for the later to be able to sell their produce, as buyers (smelters) are limited, they worked with ITRI, ICGLR, OECD and other western institutions to establish minerals certification and traceability processes where the origin of minerals are certified, minerals are put in specific bags and barrels and are tagged in order to differentiate them from smuggled minerals (Bleischwitz et al., 2012; Müller-Koné, 2015; UNGoE, 2015a).

On the other hand, there is direct and constant contact, consultations and communication between US administration and Great Lakes Governments as conflict minerals producing countries to streamline transparency, good governance and compliance with the conflict minerals provision requirements. In this regard, officials US institutions such as the State Department and USAID constantly engage their counterparts in these countries and officials from affected producing states are regularly invited in Washington DC to discuss either with the Congress or with the US Administration on the sustainability of conflict minerals provision (see for example GPO, 2013).

The conflict minerals provision is detailed in five sub-sections that constitute section 1502. The following paragraphs will introduce some details about these subsections and analyze their content.

4.3.1 Rationale of conflict minerals provision

Subsection (a) introduces the dire situation in DRC that warrants enactment of this provision. It explains that conflict minerals' contribution in aggravating the

humanitarian crisis in DRC warrants the enactment of this section. It is formulated as follows:

> It is the sense of Congress that the exploitation and trade of conflict minerals originating in the Democratic Republic of the Congo is helping to finance conflict characterized by extreme levels of violence in the eastern Democratic Republic of the Congo, particularly sexual- and gender-based violence, and contributing to an emergency humanitarian situation therein, warranting the provisions of section 13(p) of the Securities Exchange Act of 1934, as added by subsection (b).

Without affirming that minerals from DRC are the source of the conflict, this sub section reaffirms that the unregulated trade of easy-to-access resources such as minerals from DRC contribute to perpetuate conflict and aggravate violence of all sorts. However, the close reading of this paragraph highlights serious ambiguity in relations to section 1502 objectives. This ambiguity bespeak problems of effectiveness of this legal provision The ambiguity in the purpose of this law is to know whether the law intends to curb conflict minerals trade, or if it intends to alleviate the humanitarian crisis in Congo. Either objective has its resultant. One the one hand, aiming at destroying the black market of four minerals leaves the question of knowing why only these minerals in a number of natural resources that are available in the region. Indeed, after section 1502 is in place, some armed groups changed their source of finance either to other resources like illegal timber, charcoal and poaching, extortion and others (see for example the case of FDLR in Dranginis, 2016; Small Arms Survey, 2016)[13]. The recent case of M23 in 2012 shows that armed groups in DRC can manage to wage important war without necessarily exploiting minerals (Andreas Mehler, Henning Melber, 2017). On the other hand, aiming

[13] FDLR had been diversifying its source of income even before the adoption of the conflict minerals. They managed to do that in order to adapt to the situation of changing their bases due to different attacks that have been organized to neutralize them since 1996 (ICG, 2009).

at ending humanitarian crisis is also another big task that cannot be achieved by barring just four minerals on the international market. As mentioned in chapter 3, the war in eastern DRC has different causes and as long as those causes are still there, any measure that is not aiming at solving them is doomed to fail. As long as war is the only way to make their voice heard on their grievances, armed groups will look for alternative source of finance to wage war and there are the multiplication of armed groups[14] in eastern DRC hints that there are various source financing in DRC.

Another interesting feature of this introductory paragraph is that only minerals that were referred to are those originating in in DRC. This is changed in the subsequent paragraph where designated minerals not only from DRC but also from all DRC neighboring countries are targeted by this law.

4.3.2 Creation of the conflict minerals provision

Subsection (b) institutionalizes the disclosure requirement about the origin of minerals to the Securities and Exchange Commission (SEC). The following are excerpts from this subsection:

> Section 13 of the Securities Exchange Act of 1934 (15 U.S.C. 78m), as amended by this Act, is amended by adding at the end the following new subsection:(p) Disclosures Relating to Conflict Minerals Originating in the Democratic Republic of the Congo.

A part from creating the conflict minerals, this subsection indicates in its title that the target country for this provision is the DRC. As will be discussed later, DRC is understood within the Great Lakes Region and neighbors were included allegedly to avoid escalation of conflict to other countries.

[14] See footnote 4

4.3.3 Disclosure requirement and deadlines

The following sub-section introduces different deadlines and reports to be filed in the framework of implementation of this law.

> Not later than 270 days after the date of the enactment of this subsection, the Commission shall promulgate regulations requiring any person described in paragraph (2) to disclose annually, beginning with the person's first full fiscal year that begins after the date of promulgation of such regulations, whether conflict minerals that are necessary as described in paragraph (2)(B), in the year for which such reporting is required, did originate in the Democratic Republic of the Congo or an adjoining country and, in cases in which such conflict minerals did originate in any such country, submit to the Commission a report that includes, with respect to the period covered by the report:
> (i) a description of the measures taken by the person to exercise due diligence on the source and chain of custody of such minerals, which measures shall include an independent private sector audit of such report submitted through the Commission that is conducted in accordance with standards established by the Comptroller General of the United States, in accordance with rules promulgated by the Commission, in consultation with the Secretary of State; and
> (ii) A description of the products manufactured or contracted to be manufactured that are not DRC conflict free (`DRC conflict free' is defined to mean the products that do not contain minerals that directly or indirectly finance or benefit armed groups in the Democratic Republic of the Congo or an adjoining country), the entity that conducted the independent private sector audit in accordance with clause (i), the facilities used to process the conflict minerals, the country of origin of the conflict minerals, and the efforts to determine the mine or location of origin with the greatest possible specificity (b.1.A).

This sub-section introduced for the first time the adjoining countries defined by sub-section (e) as 9 countries sharing a border with DRC. My understanding of this inclusion is that minerals could be smuggled from Congo but be laundered in the neighboring country or taken there with good faith. However, the market needs to be ascertained of the real origin of the mineral.

This sub-section requires SEC to issue guidelines that will be used by companies listed on US stock market in their reporting requirement. To fulfil the requirement of this

paragraph, SEC issued the Final Rule on conflict minerals guidelines on November 13th, 2012 enclosing different requirements to companies listed on US Stock Market required to report under Section 1502 of the Dodd-Frank Act (SEC, 2012).

One requirement of this sub-section namely to declare if the product is conflict free or not was later struck by the court and is no longer relevant. On August 18th, 2015, the US Court of Appeals, DC Circuit in the judgment *NAM v. SEC* confirmed its previous decision that Dodd-Frank Act section 1502 requirement to disclose whether minerals or their derivatives used in products are DRC conflict free or not contravenes the first Amendment as was argued by the National Association of Manufacturers as it compels them to adopt a certain political speech that denigrates their products (USCA, 2015). In its decision, the Court argued that the requirement 'not to be found DRC conflict free' does neither pass the constitutional muster nor does its materiality advance the government protracted interest in reducing conflict in the region (p. 49). The court however did not change all other requirements of Dodd Frank and SEC announced that it would not appeal for this ruling as the part squashed by the court is minor compared to other requirements that were left intact. This was the end of a legal battle in which NAM had attacked Dodd-Frank Act in the court of law. In the first hearing, the court had decide in the same line in April 2014 (USCA, 2014a). It later ordered a rehearing after SEC supported by different NGOs led by Amnesty International petitioned the court to rehear the case on basis that the US Supreme Court precedent used in conflict minerals case does not fit in this situation (USCA, 2014b). After the first decision, SEC had issued guidelines staying the conflict free requirement disclosure (Taylor, 2015). According to Taylor, this final decision implies that also other stays such as the obligation to recruit the independent

audit firm to certify if minerals are DRC conflict free will remain valid unless the company chooses to label their product 'DRC Conflict Free.

Following the publication of the conflict minerals final rule by SEC, companies started filing their reports in 2014 after one year of the promulgation of the final rule by SEC but as the Government Accountability Office (GAO) found in its review, most of them were unable to determine the origin of the minerals they used in their devices (GAO, 2015b). Regarding certification of the reports, this subsection provided for a certified audit of the due diligence of the supply chain through which a company sourced its minerals (b.1 B). In case of unreliable determination, SEC and GOA have the power to reject the report as unsatisfactory (b.1.C).

In addition, in paragraph (b.1.D) the law was providing for cases where products should be labelled "DRC Conflict free" but as mentioned above, this requirement was stayed by SEC following the court's decision that it is unconstitutional. However, the company can use the DRC not free if they wish.

> For purposes of this paragraph, a product may be labeled as `DRC conflict free' if the product does not contain conflict minerals that directly or indirectly finance or benefit armed groups in the Democratic Republic of the Congo or an adjoining country (b.1. D).

This paragraph can be construed to mean that minerals from the great lakes region can be labelled DRC conflict free so long as they do not any way finance or benefit armed groups DRC and surrounding countries. Here the legislator again jumps from DRC to the entire region. Instead of DRC conflict free, it would have been "Central Africa/African Great Lakes conflict free" to be more comprehensive. It is on the basis of this paragraph that countries affected by this provision have started the process to certify the origin of

their minerals to demonstrate that their minerals are not in any way linked to armed groups and do not finance any armed conflict in DRC and neighboring countries.

The last paragraph of subsection (b) requires companies to avail all this information to the public through web posting: "Each person described under paragraph (2) shall make available to the public on the Internet website of such person the information disclosed by such person under subparagraph" (A) (b.1.E). This requirement though less expensive compared to the requirement under paragraph (b.1.A), it constitutes a reputational risk to companies because the websites constitute the main gateway between the company, its customers and the general public. In their statement to the Court of Appeals, the National Association of Manufacturers declared that obliging them to make public if their products are DRC conflict-free or not is self-denigrating and constitute a violation to the 1st amendment (USCA, 2014a).

The second part of subsection (b) describes persons who are entitled to report under this law as "(A) The person is required to file reports with the Commission pursuant to paragraph (1) (A); and (B) Conflict minerals are necessary to the functionality or production of a product manufactured by such person" (b.2). According to this paragraph any company regulated under US law that uses in its final products minerals named in this section is required to disclose if it or its subcontractors sourced from DRC or adjoining parties by carrying out a thorough due diligence through the entire supply chain (Fed Register, 2014). SEC commissioned studies have identified around 6,000 companies that fall under the jurisdiction of this paragraph (Bayer & de Buhr, 2011).

The last two paragraph of this subsection discusses details about the reporting requirement waiver (b.3), the termination of the disclosure requirement (b.4), and emphasizes that definitions of specific terms used in this paragraphs have a meaning

provided for in subparagraph (e). According to this subparagraph, , the adjoining parties are 9 countries that share an official border with DRC namely the Republic of Angola, Burundi, Congo Brazzaville, Central African Republic, South Sudan, Uganda, Rwanda, Tanzania, Zambia. These countries together with DRC form the conflict zone as per subsection (b 1. A). below is the map of the conflict mineral zone.

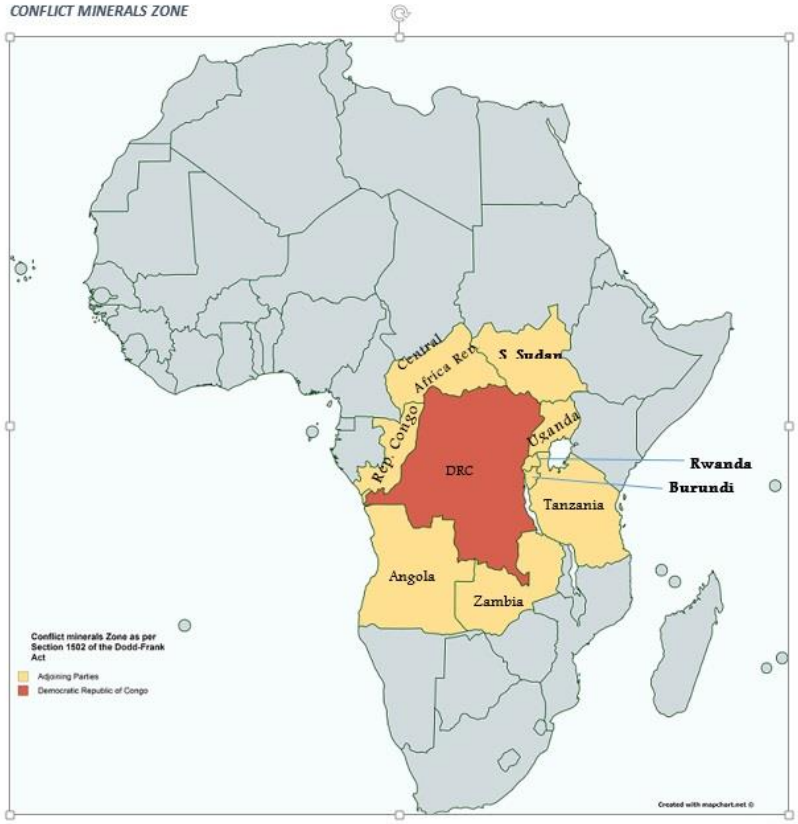

Figure 2: Conflict Zone Map

Source: own map drawn using mapchat.net

This map however overblows the situation as the actual conflict zone is smaller as illustrated in the maps made by the US State Department pursuant to paragraph c.2 of this provision that is discussed in paragraphs below. Moreover, not all these countries are affected or bothered by the conflict minerals provision as some are very far from the

eastern DRC where the conflict is taking place and/or are not producing or trading any of the four concerned minerals.

4.3.4 Strategy to address conflict minerals and their consequences

Whereas the previous subsection addressed the requirements to commercial companies, subsection (c) create a direct link between the US administration and countries in the conflict minerals zone by requiring the US administration to put in place a strategy and a map that would help to gauge and deal with the situation on the ground.

> Not later than 180 days after the date of the enactment of this Act, the Secretary of State, in consultation with the Administrator of the United States Agency for International Development, shall submit to the appropriate congressional committees a strategy to address the linkages between human rights abuses, armed groups, mining of conflict minerals, and commercial products c.1.A).
> […]The strategy required by subparagraph (A) shall include the following:
> (i) A plan to promote peace and security in the Democratic Republic of the Congo by supporting efforts of the Government of the Democratic Republic of the Congo, including the Ministry of Mines and other relevant agencies, adjoining countries, and the international community, in particular the United Nations Group of Experts on the Democratic Republic of Congo, to
> (I) monitor and stop commercial activities involving the natural resources of the Democratic Republic of the Congo that contribute to the activities of armed groups and human rights violations in the Democratic Republic of the Congo; and
> (II) Develop stronger governance and economic institutions that can facilitate and improve transparency in the cross-border trade involving the natural resources of the Democratic Republic of the Congo to reduce exploitation by armed groups and promote local and regional development.
> (ii) A plan to provide guidance to commercial entities seeking to exercise due diligence on and formalize the origin and chain of custody of conflict minerals used in their products and on their suppliers to ensure that conflict minerals used in the products of such suppliers do not directly or indirectly finance armed conflict or result in labor or human rights violations.
> (iii) A description of punitive measures that could be taken against individuals or entities whose commercial activities are supporting armed groups and human rights violations in the Democratic Republic of the Congo (c.1.B).

A comprehensive strategy as requested by this law is yet to be formulated. However, some aspects of it are being implemented in different initiatives. A

comprehensive strategy referred to in this subsection should encompass both incentives and punitive measures. Incentives are related to the promotion of peace and security, good governance and rule of law, transparency and corporate governance in DRC and the surrounding states to ensure that mining sector is streamlined and does not contribute to finance armed groups. Punitive measures would be issued against any individual or entity whose commercial activities support armed groups in DRC. It is in this regard, that president Obama amended the 2006 Executive Order targeting with sanctions some individuals dealing in illicit trade of DRC minerals (Amnesty International &Global Withness, 2015).

Scholarly research on conflict minerals has not yet covered the content of this paragraph. Existing research mainly focused on effects on companies as it is easily to get funding. However, this paragraph shows that the conflict minerals in not all about commercial companies listed on US stock market, but it also creates a direct relationship between the US administration and Central African countries grouped in the conflict mineral zone and other stakeholders operating in the same field in the region such as MONUSCO, UN Group of experts on Congo (UNGoE) and different NGOs.

4.3.5 Elaboration of the conflict minerals map

In addition to a strategy, this subsection requires the US administration is to avail a map of the conflict mineral zone and update it regularly.

> Not later than 180 days after the date of the enactment of this Act, the Secretary of State shall, in accordance with the recommendation of the United Nations Group of Experts on the Democratic Republic of the Congo in their December 2008 report
> (i) Produce a map of mineral-rich zones, trade routes, and areas under the control of armed groups in the Democratic Republic of the Congo and adjoining countries based on data from multiple sources, including
> (I) the United Nations Group of Experts on the Democratic Republic of the Congo;

> (II) the Government of the Democratic Republic of the Congo, the governments of adjoining countries, and the governments of other Member States of the United Nations; and
> (III) Local and international nongovernmental organizations;
> (ii) (Public information) make such map available to the public; and
> (iii) Provide to the appropriate congressional committees an explanatory note describing the sources of information from which such map is based and the identification, where possible, of the armed groups or other forces in control of the mines depicted (c.2.A).

As of today, the Humanitarian Information Unit of the Department of State has made public a map on DRC mineral exploitation by armed groups and other entities in 2011 that was updated four times since 2012[15]. This map covers the eastern part of DRC and shows how different armed groups including the DRC armed forces are changing control of the minerals deposit sites. The key feature of the available map is the link between armed groups and mineral deposits. Every year the updates show how armed groups are abandoning mining sites in favor of the government regulated companies. When the first edition of the map was issued in 2011, most of the mineral deposits in eastern DRC were under the control of armed groups. The 2014 map, the last update, have fewer armed groups, which translates efforts made by the DRC government and MONUSCO to eradicate hostile armed groups and demobilize pro-government militias.

Notwithstanding the provision of this law that

> The map required under subparagraph (A) shall be known as the ``Conflict Minerals Map", and mines located in areas under the control of armed groups in the Democratic Republic of the Congo and adjoining countries, as depicted on such Conflict Minerals Map, shall be known as ``Conflict Zone Mines" (c.2.B).

The map made by the State department to implement this provision only focused on eastern DRC and does not show or establish any link of the conflict minerals with the

[15] The maps are available at https://s3.amazonaws.com/hiu-products/DRC_ConflictMinerals_2017Jul14_U1587.pdf

DRC neighboring countries. This can be construed to mean either that US officials on the ground found a narrower conflict minerals zone as previously thought in Washington DC, i.e. that there is no armed groups operating in DRC neighboring countries and funding themselves with conflict minerals or the inclusion of the bigger region in the conflict mineral zone has other purposes.

Indeed, there were different levels of understanding among people who were involved in the adoption of this law. On the one hand, for practical reasons, activists and lobby groups were exclusively focusing on eastern DRC and in their campaign to regulate DRC minerals they just focused on that region (Enough, 2009; Enough Project & Global Witness, 2009). On the other, politicians in Washington were concerned by the entire region because they understood that limiting the jurisdiction of the law on a fraction of the territory would help armed groups to escape and cause insecurity to other parts that are not covered by the law (Whitney, 2015). Therefore they expanded the conflict zone to include adjoining parties.

4.3.6 Reporting by US administration to Congress

Whereas the two previous subsections (b & c) discusses relationship between the US government and companies and the US governments and Central African minerals producing countries respectively, subsection (d) organizes how US administration agencies should report back to the Congress.

> Not later than 1 year after the date of the enactment of this Act and annually thereafter until the termination of the disclosure requirements under section 13(p) of the Securities Exchange Act of 1934, the Comptroller General of the United States shall submit to appropriate congressional committees a report that includes an assessment of the rate of sexual- and gender-based violence in war-torn areas of the Democratic Republic of the Congo and adjoining countries (d.1).

Immediately after the promulgation of the conflict minerals provision, GAO published in September 2010 a report reviewing information related to the conflict minerals and different issues that would be tackled to increase compliance to the conflict minerals provision requirements (GAO, 2010). In 2012, the comptroller general issued a report that reviewed what SEC had so far done in issuing the conflict minerals rule and stakeholders' initiatives especially companies towards complying with the conflict minerals disclosure rule and any reviewing available information on the rate of sexual violence in eastern DRC and neighboring countries (GAO, 2012). The comptroller general shows in this report that the promulgation of the conflict minerals disclosure rule did not improve information on sexual violence in the region. This report has one particular aspect that it only reviews sexual violence in eastern DRC and three countries bordering it namely Burundi, Rwanda and Uganda. Other remaining 6 DRC adjoining countries are completely ignored.

Regarding the effectiveness of the regular reports, the law stipulates that

> Not later than 2 years after the date of the enactment of this Act and annually thereafter, the Comptroller General of the United States shall submit to the appropriate congressional committees a report that includes the following:
> (A) An assessment of the effectiveness of section 13(p) of the Securities Exchange Act of 1934, as added by subsection (b), in promoting peace and security in the Democratic Republic of the Congo and adjoining countries.
> (B) A description of issues encountered by the Securities and Exchange Commission in carrying out the provisions of such section 13(p).
> (C)(i) A general review of persons described in clause (ii) and whether information is publicly available about:
> (I) the use of conflict minerals by such Persons; and
> (II) Whether such conflict minerals originate from the Democratic Republic of the Congo or an adjoining country.
> (ii) A person is described in this clause if:
> (I) the person is not required to file reports with the Securities and Exchange Commission pursuant to section 13(p)(1)(A) of the Securities Exchange Act of 1934, as added by subsection (b); and

(II) Conflict minerals are necessary to the functionality or production of a product manufactured by such person.
(3) Report on private sector auditing
Not later than 30 months after the date of the enactment of this Act, and annually thereafter, the Secretary of Commerce shall submit to the appropriate congressional committees a report that includes the following:
(A) An assessment of the accuracy of the independent private sector audits and other due diligence processes described under section 13(p) of the Securities Exchange Act of 1934.
(B) Recommendations for the processes used to carry out such audits, including ways to:
(i) Improve the accuracy of such audits; and
(ii) Establish standards of best practices.
(C) A listing of all known conflict mineral processing facilities worldwide.

This subsection (d) enumerates different components of the reports that should be sent to the Congress by relevant agencies. Some requirements are in the existing attributions of the agencies but some are new. In fact, this subsection creates new functions to the SEC and the Comptroller General of the United States whereby they are required to file annual reports to the congress on the evaluation of the rate of sexual and gender based violence in "war-torn areas of DRC and adjoining parties until the law is rescinded". This is visibly a function that is additional to their tradition roles of protecting investors, maintaining fair, orderly, and efficient markets, and facilitating capital formation for the SEC and investigating how the federal government spends taxpayer dollars for the Comptroller General (Kluwer, 2015). Though the law provided for the first report in two year after its promulgation, the comptroller general issued his first report on August 18th, 2015 almost after five years, after analyzing different reports submitted to SEC by private companies in compliance with the conflict minerals provision. As indicated above, the review of the reports indicated that companies still have difficulties in carrying out due diligence in the entire chain of custody of minerals (GAO, 2015b).

Paragraph (d.3) gives assignment to the Secretary of Commerce to ensure that reports of private auditing firms and due diligence reports meet the standards set by SEC[16]. Since 2012, SEC and GAO have filed reports to the Congress detailing different aspects as required in this subparagraph (see for example GAO, 2012, 2015a, 2015b). In the recommendations of the comptroller general in his review of 2016, he asked that "Commerce establish a plan outlining steps and time frames for assessing the accuracy of due diligence processes such as IPSAs, and developing the necessary expertise to fulfill these requirements" (GAO, 2016). He concludes that Commerce concurred with GAO's recommendation.

4.3.7 Definition of terms used in this provision

The last subsection defines different terms such as adjoining parties, conflict minerals and appropriate congressional committee and armed groups. Two of them "armed group" and "under the control of armed groups" will be defined hereunder as others have been discussed in previous sections or paragraphs.

> The term "armed group" means an armed group that is identified as perpetrators of serious human rights abuses in the annual country reports on human rights practices under sections 116(d) and 502B(b) of the Foreign Assistance Act of 1961 (22 U.S.C. 2151n(d) and 2304(b)) relating to the Democratic Republic of the Congo or an adjoining country (e.3).

The term armed groups does not discriminate from those allied to the government or those fighting the government. The only criteria to fall under the application of this law is whether or not they are accused of committing human rights violations and included in annual State Department report on human rights. Armed groups that fall under this definition include many DRC armed groups and foreign armed groups operating on DRC

[16] The requirement to recruit auditing firms for the purpose of disclosure was stayed by SEC after the first judgment by the Court of Appeal and this stay is likely to be maintained.

territory especially in its eastern part such as the Rwandan Liberation Democratic Forces (FDLR) and the Allied Democratic Forces-National Alliance for the Liberation of Uganda (ADF-NALU). Though they are not based in the adjoining parties, they still have some link with their home countries. In addition, there have been accusation of adjoining parties supporting local Congolese armed groups such as the case of Rwanda support to RDC-Goma, CNDP and M23, and Uganda support to RCD-Kisangani and M23. They also include different Mai-Mai militias allied to government forces or fighting against them (see Alusala et al., 2014; Hege et al., 2012; Stearns, 2012).

> The term ``under the control of armed groups'' means areas within the Democratic Republic of the Congo or adjoining countries in which armed groups:
> (A) Physically control mines or force labor of civilians to mine, transport, or sell conflict minerals;
> (B) Tax, extort, or control any part of trade routes for conflict minerals, including the entire trade route from a Conflict Zone Mine to the point of export from the Democratic Republic of the Congo or an adjoining country; or
> (C) Tax, extort, or control trading facilities, in whole or in part, including the point of export from the Democratic Republic of the Congo or an adjoining country.

It is this paragraph (e.5) which defines the term 'under the control of armed groups' that warranted the certification of mining deposits in adjoining parties to ensure that minerals extracted from them are not labelled conflict minerals. In fact, different initiatives have started in DRC and Rwanda to ensure traceability of minerals and streamline the supply chain in order to certify to the clients that they do not come from mines or areas under the control of armed groups. The certification processes are detailed in chapter 6.

4.4. Effects of the Dodd-Frank act, Section 1502

As a distortion to free trade of minerals from Central African countries, Section 1502 of the Dodd-Frank was intended and expected from the beginning to yield some

negative effects on different categories of people in the sender, the targets and the third party countries. However, the most affected by this law section are concerned producing countries and their companies. Already during congressional debate on this law, there were concerns among sponsors of the bills about their anticipated effects. The statement of Senator Russ Feingold in this regards foretells what would be the future effects of the conflict mineral rule. According to Sen. Russ Feingold, regulating trade of the four criminalized minerals should be done with caution because of various perverse effects it might have on different communities that survived out of artisanal mining in eastern DRC (Woody, 2012). During debates on Brownback bill in the senatorial committee, Feingold stated that "DRC have livelihoods intertwined with mining economy. Thus all-out prohibitions or blanket sanctions could be counterproductive and negatively affect people we seek to help"(GPO, 2009b, 155 REC S. 4687). He reiterated that he is "confident that the Congo Conflict Minerals Act would be sensitive to this complex reality" (idem).

Conflict minerals provision is foreign policy tool using economic levers to endeavor changing the political behavior of different actors in DRC and adjoining parties. It has effects on trading companies in the sending state (US) and receiving states (Central African States), to the regulatory bodies in the sending states, to the economies and social welfare of the target states as well at a certain extent to the third parties. As it will be discussed later in chapter 6 in the Rwandan case, these effects are mainly negative but the introduction of the conflict minerals measures had produced some positive effects on mining sectors.

4.4.1 Effects on the US

Regarding effects on the US administration, the enactment of 1502 has had different effects. For Washington politicians, section 1502 constitutes a milestone to solve

the continuing Congo crisis. According to some reports, armed groups have lost more than 60% of the mines they were controlling in eastern DRC before the adoption of this provision and the price of the black market 3TG has fallen to 30-40% of the price paid for minerals with certified origin (GAO, 2015b). This at least brings partial satisfaction to Washington politicians.

It is worth noting here that the US legislation on conflict minerals has had snowball effect in the sense that it awakened other countries to regulate in the same vein. The adoption of conflict minerals provision led the EU to start discussions about the possibility of a law on responsible sourcing of minerals. On March 16th, 2017, the European parliament adopted "the legislative resolution on the proposal for a regulation of the European Parliament and of the Council setting up a Union system for supply chain due diligence self-certification of responsible importers of tin, tantalum and tungsten, their ores, and gold originating in conflict-affected and high-risk areas" (European Parliament, 2017). The regulation will enter into force in January 2021 (art. 20 par. 3. Its difference with Dodd-Frank is that it has a broad scope as it covers all conflict-affected and high risk areas not a specific region (Covington, 2017; Latek, 2017). Likewise, but on a low level, the Chinese Chamber of Commerce also issued guidelines to Chinese companies to ensure that minerals they purchase are not sourced from or routed through conflict areas. These guidelines are also broad as they do not target any region or type of minerals (CCCMC, 2015). The Chamber of Commerce issued these guidelines in the framework of complying with the Memorandum of Understanding China signed with OECD in October 2014 on responsible sourcing of natural resources.

Despite this positive effects, SEC has already showed that it is difficult regulate the supply of some conflict minerals, more specifically 'gold'. In fact, to track down the

supply chain of gold revealed complicated as it is refined by many operators worldwide and more than once unlike 3Ts that have a limited number of smelters and refiners that can be controlled by the issuers. In fact, when new gold is mixed with scraps and stock, it becomes almost impossible to trace its origin. Besides, gold is valuable and often used as exchange currency thus dynamic and fluid (UNGoE, 2014). This further complicates the exercise of mapping its entire supply chain (Cuvelier, 2010; see also UNGoE, 2015). Likewise, only 10% of companies complied with to the final rule issued in 2012 that requires all companies concerned to make a disclosure according to this final rule(GAO, 2015b).

On financial side, SEC has been negatively affected. SEC reports that monitoring compliance with section 1502 alone has so far cost $700 million in just four years (Kluwer, 2015). In addition, SEC was dragged to perform humanitarian functions that are outside its traditional area of expertise of regulating financial markets (Woody, 2012).

4.4.2 Effects on companies

Companies as the direct target of this law have been affected by it in many ways. Some were obliged to change their suppliers, whereas most of them had to spend some money on the due diligence process to ensure that some of the minerals used in their devices were not sourced from conflict minerals zone. As elaborated above, for some minerals such as tantalum, the African Great Lakes Region is strategic in the sense that it supplies to the world market more than a 65% of the needed tantalum (USGS, 2016a). SEC estimates that in total the African Great Lakes region's supply on the world market 20% of 3TGs combined (Fed Register, 2014, p. 56356). Contrary to what was proposed by the Senate that only companies sourcing from DRC should file a disclosure report (US Senate, 2010), the conflict minerals provision requires all companies using components

containing 3TGs to file a disclosure to SEC even when they source their minerals from other regions (Woody, 2012).

According to Tulane Law School study, by 2012, section 1502 directly regulated activities of 5,994 electronic companies registered on US stock market (issuers) and indirectly 860,066 other companies that supply components to the issuers (Bayer, 2011, p.18). These include 711,607 large private suppliers and 148,459 small private suppliers. Whereas the issuers have means and tools to comply with implementation measures put in place by SEC following Section 1502, private supply companies find it difficult especially small ones from the producing countries (Woody, 2012).

In the preparation of the SEC final rule on conflict minerals, the association of companies have estimated the cost of carrying out due diligence and reporting between $8 and $16 billion (Fed Register, 2014, p. 56336). They argued that this money is necessary for private company suppliers to modify the management systems in order to be able to provide critical information to the issuers. Initially, SEC had estimated the cost of compliance at $71 million. Later it reviewed its estimation at initial cost that lies between $3 and $4 billion in order for company to develop compliance programs and between $207 and $609 million as annual amount spent on compliance to Section 1502 (Fed Register, 2014, p. 56351).

In its study, Tulane Law School concluded that $71 million initially proposed by SEC is too low and that the figures proposed by manufacturers are also overstated (Bayer, 2011, p.3). The right figure according to Tulane study was $7.93 billion. Still, this figure is far above the last estimates of SEC of $3-4 billion (Woody, 2012). Tulane study argues that the association of companies overestimated the number of suppliers but reiterated the need for private supply companies to strengthen internal management systems and

obtaining independent private sector auditors (SEC, 2012). Though this cost, when divided among individual companies, might look affordable for the electronic giants such as HP and Intel, it constitutes a heavy burden for small companies the reason why SEC has been petitioned to consider alleviating the cost for small companies which it had not yet done (SEMI, 2011).

This study by Tulane University received criticism from Assent[17] and Claigan Environment Inc.[18] that the costs advanced by both Tulane study and the Manufacturing Industry Group do not reflect the industry practice in compliance programs by the majority of the issuers, thus they advised SEC to not rely on these figures in the elaboration of the implementation tool of section 1502 (Bayer, 2014; see also Assent, 2011; Claigan Environmental Inc., 2011). Despite disagreement among different actors that were requested by SEC to comment on the provisional conflict minerals implantation measures, all of them agree that section 1502 creates additional costs in companies' finances as they have to meticulously analyze all information about the origin of all their 3TG by tracking down the whole supply chain from the production sites. In order to minimize cost, many companies have resorted to boycotting minerals from DRC and surrounding states as it require mores reporting than minerals sourced elsewhere (Narine, 2013).

4.4.3 Effects on DRC

Regarding effects on DRC and its population, the effects have been mostly negative even if traceability process has started building trust among investors in mining

[17] Assent is a company that builds software to help other companies to automate processes, reduce workload, increase efficiencies and ultimately to save on compliance costs.

[18] Claigan Environment Inc. is a Canadian company that specializes in the field of environmental compliance of professional products

(Geenen, 2012; Kelly, 2014). At the beginning, the DRC government and her lobbies supported the adoption of Section 1502. The Congolese government was at many times represented in the Congress committee sessions that were debating section 1502 of the Dodd-Frank. After the Dodd-Frank Act was signed into law, DRC government issued a statement lauding this achievement as a big milestone in stopping violence in its eastern part especially in Kivu provinces (Seitz, 2015). However, this enthusiasm became a mirage in subsequent days when it became clear that Dodd-Frank Section 1502 was negatively affecting the Congolese socio-economic situation than salvaging the eastern DRC security situation. According to the DRC group of companies involved in mining, Dodd-Frank should be discarded and replaced by another measure that attacks directly the source of conflict (Tegera et al., 2014).

The mining sector in Congo being artisanal-based, the expensive and slow-moving process of certifying all mining deposits, tagging and bagging had an effect on the lives of not only miners but also their extended families that survived out of this activities (Müller-Koné, 2015). Immediately after the Obama administration signed Dodd-Frank into law, president Kabila of DRC decreed a total ban on mining of 3GTs in eastern part of DRC (Autesserre, 2012; Seitz, 2015). This caused havoc in the mining sector and resulted in more than 2 million people losing their income and this affected around 10 million people including household members who survived out of activities related to mining sector in eastern DRC (Seay, 2012, Narine, 2013). This also led to the increased smuggling as the traceability and certification process that would be depended on to reopen mines took long and were marred by corruption and bureaucratic delays (Taylor, 2015). Besides, other sectors such as small shops that depended on miners to sell their commodities also collapsed (Autesserre, 2012). The increased unemployment led

miners to struggle to find other jobs including joining armed groups for survival (Raghavan, 2014.)

The Conflict minerals rule and the mining ban decreed by President Kabila had serious socio-economic consequences on communities. Affected people are no longer able to afford basic services such as healthcare services, schools for their children as their source of income was shut down (Matthysen & Montejano, 2013; Parker et al., 2016). Enough project, the heavy weight behind Dodd-Frank's Section 1502 acknowledged that there is a negative impact on the population but mitigated that it is being slowly corrected with time as former artisanal miners are progressively getting employment in other sectors (Taylor, 2015). However, this is downplayed by Mr. Eric Kajemba, the Director of a Governance and Peace observatory in DRC. As quoted by Taylor, Eric Kajemba declared that things cannot be easily corrected as long as DRC government is "so weak that it does not control parts of the territory plagued by wars and violence for years and the economy of these areas is torn out" (Taylor, 2015, p. 210). He emphasizes that the US law could have taken this into account. To put Kajemba's assertion into context, one needs to understand how artisanal mining works and how the proto government created by armed groups works in eastern DRC.

In artisanal mining, miners are not officially employed by mining companies. As substantiated by Parker and Vadheim (2013) who studied the consequences of the conflict minerals provision on artisanal miners in eastern DRC, artisanal miners work independently with their resources but quite often sell their production to the company. Depending on the level of administrative control, artisanal miners work in a defined concession owned by a mining company or in undefined territory. Parker and Vadheim estimated the number of artisanal miners in eastern DRC to be currently between 710,000

and 860,000 persons (p. 6). Different parts of eastern DRC, especially in areas far away from the cities, warlords control vast territories enclosing mining sites and have created proto-states ensuring minimal state services such as taxation, providing security and order and others (Larmer et al., 2013; Laudati, 2013). Before the ban by president Kabila, artisanal miners were sharing their proceeds with militias after selling their minerals to traders and this ensured their security and daily living of miners and the population. The ban not only increased poverty but also exacerbated violence (Geenen, 2012). Thus, some scholars conclude that though the impact of section 1502 of the Dodd-Frank on DRC is still ambiguous due to different interests, it is clear from the onset that conflict minerals provision cannot alone solve the root cause of the DRC problems that in return create war and violence (Taylor, 2015).

4.4.4 Effects on DRC neighboring countries (excluding Rwanda)[19]

Before looking at effects on the adjoining countries, it is important to understand why they were included in the conflict minerals zone. From my exchange with Toby Whitney[20] with whom I had different email exchanges on conflict minerals, the US Congress had several meetings with business, government and civil society from US and some of the adjoining countries in the course of enacting section 1502 (email exchange of 25/12/2015). The aim of these consultations was to understand the possible effects of the law once it is adopted. They talked to different people including Tanzanian and Angolan governments and company officials to know what commodities they had, the profile of their industries (industrial vs artisanal, etc.) what the transportation routes were,

[19] Rwandan case will be detailed in subsequent chapters 5 and 6.

[20] Toby Whitney is an Affiliate Professor at the University of Washington's Henry M. Jackson School of International Affairs who was a Fellow for the US Congress House of Representatives' Ways and Means Committee and was Legislative Director for Congressman Jim McDermott (D-WA) and worked on Section 1502 on conflict minerals in the Dodd-Frank Act.

and how close the nearest armed groups were to their borders and at the possibility and impact would be if they were excluded. Policy makers were convinced that the black market would grow in the uncovered countries, and some armed groups and/or actors would migrate across those borders. The Congress also knew that commodities targeted in conflict minerals constitute a large part of the economies of some countries in the region, and that encouraging US-regulated companies to be transparent about their sourcing in the region would impact in settling commercial practices and to peoples' livelihoods of all kinds -- those helping to fund armed groups and those who haven't had to be certified transparent before. The Congress understood that these adjustments would pose challenges and dislocations, but over the long term would save more lives and create more stability than allowing the black market to grow and move (email exchange of 26/12/2015).

Regarding effects on the region as a whole, the implementation measures established under the conflict minerals rule are cumbersome and its widespread communication provoked further international attention leading to the creation of a negative image on minerals in the region. This in return led to discouraging companies from sourcing their minerals from DRC and adjoining parties thus fostering a de factor embargo (Owen, 2013; Seay, 2012). As discussed in the above paragraphs, this leads to illegal mining and smuggling and this benefits armed groups (Matthysen & Montejano, 2013).

However, adjoining countries are affected differently due to the structure of their economies and their level of economic dependence on the minerals that were targeted by Section 1502. Conflict mineral zone as illustrated in map above (figure 2) comprises 10 countries. Among 9 adjoining countries, only 4, namely Burundi, Rwanda, Tanzania and

Uganda share with DRC the eastern border that is mainly the theater of armed conflicts and the main one of conflict minerals. Regarding 3TGs, only DRC, Rwanda and Burundi produce them. Rwanda produces 3Ts whereas Burundi, DRC and Tanzania have some amount of gold in addition. Besides 3TG, DRC has got a plenty of other minerals such as cobalt, copper, uranium and diamond (USGS, 2015). Tanzania also does not rely on 3TGs for its mineral export and its economy is more diversified. Burundi's mining efforts are mainly put on nickel that is not on the list of conflict minerals and since 2015, Burundi is more concerned by internal political struggles than anything else. Thus, Rwanda is the main affected country due to its economic vulnerability based on its high dependence on exports of 3Ts and the concentration of its minerals clients among the companies directly concerned by Section 1502.

Other DRC neighboring countries are not bothered by section 1502 of the Dodd-Frank as they depend on other minerals and natural resources not concerned by this law. Zambia exports copper, Angola produces petroleum oil and diamond, the Republic of Congo produces petroleum oil, Central African Republic is rich in uranium whereas South Sudan is rich in petroleum oil (USGS, 2015). These countries have only the obligation to ensure that their territories are not used to smuggle or launder conflict minerals (Whitney, 2015).

It is noteworthy that the conflict minerals provision requirement was extended to the entire region instead of DRC or eastern DRC alone for dissuasion purposes because the legislator understood that the trade of conflict minerals being profitable could easily shift to escape the geographic scope. By doing this, as stated by the Rwandan Minister of State in charge of Mining, the conflict minerals provision established a presumption of guilty for all minerals from the African great lakes region and it is up to concerned

countries to prove otherwise. In his words, "all 3TG from the region including those that are still under the soil are presumed conflict minerals until they are certified to be conflict-free" (Interview of 22/2/2016)[21]. US lawmakers required economic actors under US law to report on their activities in the entire region including countries that are not in conflict and have never been such as Zambia and Tanzania. According to the exchange Toby Whitney on 35/12/2015, the Congress understood that mineral sourcing in Central Africa happens across many borders, that the black market has several layers where different parties have different roles and many actors including dozens of armed groups and many factions within the different militaries. The Congress also understood that the black market moved quite a bit over time. Some of the commodities did not fund conflict, and some did, and the geographic mix changed over time. Therefore, the Congress felt that a small zone of regulation by companies would force the illegal activity and the conflict to move to a nearby uncovered area. Mining, transit, actors, exchange, and conflict would move (some or all of these). Congress's concern was not just "Eastern Congo" as some advocacy groups such as Enough Project were focusing, but Congress considered the issue more broadly. The Congress was concerned about all of these countries and particularly about the result of applying economic pressure on too small of an area thereby encouraging armed groups and instability to move to other areas. Using different reports such as the UNGoE, the Congress was convinced that even peaceful countries like Zambia shared different border posts with DRC such as Lubumbashi near the Zambia border and were used as commodity export routes. Therefore Zambia as well as other bordering countries has facilitated the transit of black market minerals in the past.

[21] This is taken from the interview with Hon. Imena Evode, minister of State for Mining in Ministry of natural resources, Kigali, 22 February 2016.

Therefore, sanctions and incentives aiming at alleviating security and humanitarian situation in DRC should cover all the neighboring countries.

4.5. Nature of section 1502 of the Dodd-Frank

Section 1502 of Dodd-Frank Act (conflict minerals provision) is a US legislative effort attempting to regulate trade of designated minerals through constraining the supply chain of these minerals to US regulated companies whose final products contain components from these minerals. Thus it regulates exports of commodities from foreign countries. The conflict minerals provision is not the first US law of this kind (Whitney, 2015). In the past the US has used laws to fight against some practices and behaviors encouraging war and violence in different countries. Whitney list a number of similar laws such as Harkin-Engels Protocol on cocoa, the Lacey Act on black market timber, the Clean Diamond Trade Act, and the Burmese Jade Act. In addition, different US administrations have also used targeted executive orders such as President Clinton in 1999 on black markets and Bush in 2006 and Obama in 2014 on Congolese natural resources plunder (NARA, 2006; see also Withney, 2015). Quite often, the US. Government makes laws and regulations that govern persons and companies regulated under U.S. law and indirectly compels governments trading with those trading with the US regulated persons/companies to adopt certain behavior if they want to keep trading with US companies and individuals. This is the modus operandi of Section 1502 of the Dodd-Frank which consists of using regulated companies sourcing in the Great Lakes Region to force their client countries to change their policies. This was done when companies threatened to boycott and eventually boycotted minerals from the region. The boycott compelled the affected governments to devise ways of earning back clients of their minerals.

Whereas Section 1502 nature has been assimilated to the Kimberley Process on diamond, there are fundamentally different. On the one hand, the Kimberly process is a soft law, i.e. a voluntary international initiative that groups together states, companies, civil society and others actors in diamond supply chain and its purpose is to ensure that diamond traded on international market is free from conflict and other violations. It is binding among parties that subscribed to it and any party can withdraw from the process at will (Jojarth, 2009; Sethi & Emelianova, 2011). On the other, section 1502 is a US unilateral law that indiscriminately affects different actors who deal in designated minerals and is compulsory to US regulated companies and does not require the consent of the target states (Nishiuchi & Perks, 2014). Both the section 1502 and the Kimberley process operate on the chain of custody of minerals but their modes of operation are different in the sense that section 1502 does not require prior consent of affected parties. As the conflict minerals are being legislated by other countries in the world, the convergence of these legislations might end up in an agreement similar to Kimberley process (Carpenter & Conrad, 2012). In conflict minerals, there are processes that are similar to Kimberley process such as the Responsible Mineral initiative (RMI) former Conflict Free Sourcing Initiative (CFSI) founded by the Electronics Industry Citizenship Coalition (EICC) and Global e-Sustainability Initiative (GeSI) to audit the supply chain of minerals especially the smelters (Assent, 2015; Jameson, Song, & Pecht, 2015).

Normally, the law plays one or many of the four roles namely to forbid, to discourage, to encourage or to require someone to do something. Section 1502 at the same time discourages, encourages and requires companies ("issuers" in SEC language) to analyze their source of 3TG supplies and report to the SEC about their origin. This law encourages companies to only buy conflict-free minerals and discourages them to source

in the central African region so long as minerals from the region are considered to be not-DRC conflict-free. In this sense, section 1502 of Dodd-Frank Act constitute a trade restriction, a form of economic sanctions, in the sense that it creates barriers in the free trade of four minerals from the great lakes region with the intention of reaping a political change in target countries.

The requirements of Dodd-Frank Act, section 1502 satisfies the description of smart economic sanctions as elaborated by Eriksson (2011). According to this scholar, smart sanctions either target individuals or groups of individuals, specific commodities or specific area. Conflict minerals provision at the same time target specific commodities namely tin, tantalum, tungsten and gold-3TG, and a specific area namely DRC and adjoining parties (para. b.1.A) with the objective of changing political behavior of central African minerals producing countries (; Parker & Vadheim, 2013).

The sanctions imposed by conflict minerals provision are not comprehensive in the sense that they do neither directly affect the general population of the concerned area nor do they affect all commodities or all companies sourcing from the region.

Section 1502 also qualifies for the criteria of a disguised economic sanction as defined by Buggenhoudt (2014) due to its extraterritorial effects that in an indirect manner restrict trade and also aim at achieving a political goal of forcing regional countries to cease supporting to armed groups operating in Congo. According to Polk (2014), conflict minerals is the same nature with anti-bribery regulations and economic sanctions and has ramifications as it also affects mining companies in the conflict zone i.e. DRC and adjoining parties as well as suppliers and business partners of the US regulated companies, the main targets of the Dodd-Frank, section 1502. This opinion is

shared by Givon Advisors Ltd, a law firm specialized in compliance issues qualifies conflict minerals as economic sanctions (Kessler, 2014).

For the US government, Dodd-Frank Act's Section 1502 aims at achieving an economic and national security objective (Whitney, 2015). The national security objective has several parts such as stability, defunding non-state actors and promoting human rights. The economic policy objective is related to purposes such as stable commodity markets, stable sourcing, discouraging the use of black markets through layers of supply chains that obscure illegal activity and accountability. This satisfies at the same time the definition of economic sanction by Boomen (2014) as measures taken by the sending state with the intention of altering the behavior of the targeted states to abide by international ethical norms and Galtung's definition as "actions initiated by one or more international actors (the Senders) against one or more others (the receivers) with each or both of two purposes: to punish the receiver by depriving them some value and/or to make the receiver comply with certain norms the senders deem important" (Galtung, 1967, 379). The conflict mineral provision not only imposes distortions in free trade of minerals but also compels different actors including governments within the conflict zone to stop abetting armed groups by either laundering illicit minerals or serving as trade routes. Though some scholars would argue that Dodd-Frank only target US regulated companies (Whitney, 2015), the many argue in the contrary as Section 1502 of the Dodd-Frank is about the entire supply chain and this chain starts from the producing countries and their mining and mineral exporting (Woody, 2012).

The above paragraphs confirm what the literature had already confirmed. Owen (2013) examining the impact of section 1502 on DRC humanitarian crisis it was intended to solve has already established that Section 1502 is an economic sanction levied against

DRC and its neighboring countries after analyzing all elements of economic sanctions theory. Equally, Parker et al. (2016) using the case of section 1502 to study the impact of economic sanctions on human rights, more specifically on infant mortality argued that the conflict minerals provision is an economic sanction. I thus concur with the conclusions of these scholars that Dodd-Frank Act constitutes an economic sanction as it cannot be isolated from the conflict zone it created, and the same zone that is suffering from effects of Dodd-Frank Act (Owen, 2013). Though the total ban espoused by the 1st Brownback bill was rejected as it was against international trade laws to ban a specific commodity from a specific location, it is only the wording that was changed in section 1502 that encompasses the entire 2nd Brownback bill. My view is supported by Seitz (2015) and Seay (2012) who argue that instead of declaring a total ban, the law and measures put in place to implement led to a boycott of minerals from the region by imposing a cumbersome and costly procedure that not only makes minerals from the region uncompetitive but also undesirable by companies that fear for their reputation.

Moreover, US regulated companies cannot underestimate the power vested in SEC. In fact SEC has the tools to take in reports across all industries, and the expertise to apply the standards in the law, and the capacity to enforce the requirements using fines, court actions, and so on. By changing the conflict minerals enforcement from US ports as earlier suggested in the 1st Brownback bill to SEC the conflict intended to press where it hurts companies by regulating the supply chain and establish connection between the mine and smelters as ports were not appropriate authority to track that chain as they do not have that capacity (Whitney, 2015). Thus SEC was better placed to require transparency in sourcing of minerals and their derivatives and persuade companies to abandon minerals that are deemed not conflict-free rather than totally banning them by a

legal provision. The fact of holding responsible the US regulated companies of the entire supply chain increases the likelihood of effectiveness as it eliminates some fraud based on the rules of origin (Buggenhoudt, 2014). In fact, the ban on conflict diamond has revealed that dealing with states only without involving all stakeholders increased fraud and flawed the whole initiative (Woody, 2012; Ylönen, 2012).

Looking at the ultimate objective of Section 1502 of stopping an emergency humanitarian situation in DRC by depriving armed groups of their financial means, from the fact that the mere presence of this law cannot in itself stop violence that leads to this dire humanitarian crisis, this economic sanction can at least be praised to have served a dissuasive and symbolism roles as defined by Nossal (1987). It already played a dissuasive role in the sense that as it gave the message to DRC-based armed groups and neighboring states that they should refrain from messing up with DRC resources. As domestic symbolism, the conflict minerals is a relief to different activists and lobby groups that pressured for the regulation minerals to attempt salvaging eastern DRC, while as international symbolism, section 1502 gives a message to the international community that the US as a super power upholds on principles and values of human rights and will not leave unpunished the violators.

4.6 Conclusion

Section 1502 of Dodd-Frank Act modus operandi is classic to economic sanctions whereby the US uses its economic and political clout to force foreign countries to change their political attitude towards a behavior it considers reprehensible. By targeting the trade of 3TG, the US took into account the vulnerability of the target states. It is on the basis of vulnerability analysis that Rwanda emerges as the main target of the conflict minerals provision.

This chapter attempted to show that the conflict minerals provision came as a result of a worsening humanitarian situation in eastern DRC and the failure of other US attempts to stabilize the situation. The conflict minerals provision came as reminder to regional countries about their responsibility in Congo war and violence especially Rwanda that has been cited in many reports as an influential actor in eastern Congo war and illegal exploitation of mineral resources as detailed in chapter 3.

Regarding the content of the provision, it creates obligations to different actors, domestic and international, public and private. The conflict minerals provision became successful in the sense that it became widely known due to worldwide campaign by NGOs and outcry of US regulated companies and their suppliers in the aftermath of its adoption.

Concerning the effects, the conflict minerals effectively affected eastern DRC and Rwanda as the main producers of the designated minerals. It is not yet documented what US regulated companies lost as a result of this provision. There are only estimates calculated during the draft of the final rule by SEC. To minimize cost related to compliance with this provision, some companies opted to boycott minerals from the designated region whereas others shifted the burden of certification of origin to the exporting countries.

The requirement put on producing countries by the US legislator together with the pressure exercise upon them by the market to certify the origin of the minerals and the effects caused in mining industry in producing countries led scholars to conclude that this conflict minerals is an economic sanction because its main aim is to bring producing countries to change their policies related to supporting the black market of minerals from Congo.

The next chapters will discuss in details the status of Rwandan mining at the time section 1502 was adopted, its effects and how Rwanda leveraged on the reforms that were going on to mitigate the effects of section 1502 of Dodd-Frank Act.

CHAPTER 5: HISTORICAL BACKGROUND AND CHARACTERISTICS OF RWANDAN MINING SECTOR

Commercial mining in Rwanda is old as its encounter with the west at the beginning of the 20th Century. This chapter discusses the history of mining in Rwanda. It attempts to prove that, contrary to some allegations that Rwanda relies on minerals illegally purchased from DRC, it has a sturdy mining sector that if it is well developed could be one of the key levers of socio-economic development. As it will be discussed, mining sector in Rwanda had its ups and downs. It boomed during colonial period, declined after independence until 2006 when Rwanda privatized all mining concessions and liberalized the sector. The conflict minerals provision came in when Rwanda's mining sector was still struggling to take off.

The purpose of this chapter is to introduce different reform initiatives which were undertaken in Rwandan mining sector with emphasis on post privatization reforms on which Rwanda's compliance with the conflict minerals provision was built. This chapter highlights challenges that faced policy implementers in this period related to diverging interests between private operators who imported or smuggled cheap minerals from eastern DRC and the requirement of mining policy that underlined investment in local mining. As it will be discussed later in chapter 6, the adoption of conflict minerals provision removed this dichotomy. This chapter is important in the sense that you cannot full understand the extent of effects of section 1502 of Dodd-Frank on Rwanda without grasping Rwandan mining historical context, sector characteristics and vulnerabilities.

The first section of this chapter reviews historical phases of Rwandan mining sector. The second section discusses availability of minerals in Rwanda and characteristics of Rwandan mining sector. The third section introduces effects of section

1502 of Dodd-Frank Act. The fourth section of this chapter analyzes Rwandan vulnerability as the main factor discussed by the theory to understand the effectiveness of economic sanctions and introduces the new element this study suggests as another important factor for effectiveness of economic sanctions.

5.1 History of mining in Rwanda

The history of mining sector in Rwanda can be divided into three main phases. The first phase corresponds to the launch of modern mining activities in 1900s to the 1st mining sector reorganization by the post-independence authorities in 1966. This period is dominated by the colonial mining companies. The second phase corresponds to the post-independence era until 1996, when the post-genocide regime in Rwanda resumed mining activities after they were shattered down by the four year civil war and 1994 genocide against Tutsi. The third phase, the post-genocide mining sector, is dominated by privatization, cross-border trade, the issuance of OECD guidelines and adoption of Section 1502 and reforms in the Rwandan mining sector

5.1.1 Rwandan mining sector during colonial era

Pre-colonial Rwandans were practicing rudimentary mining especially for the useful metals such as iron ores, copper and different gems for jewelries they needed in their daily activities (Mushimiyimana, 2016). According to the account of drafters of the Rwanda Mining Plan, modern mining started with the discovery of tin deposits in eastern Rwanda. The first tin mines were discovered by chance in 1908 by Greek merchants, the Gargarothos brothers, who were trading in coffee and ivory when they were traveling from one of their shops. They discovered strange stones in Mugogo, eastern Rwanda, that they took to London to the British Museum that later confirmed that it was cassiterite in which tin, a sought after metal is extracted, and that it was by then being mined in Manono,

Belgian Congo. These merchants got an exploration license for Mugogo mines (eastern Rwanda) from the German government that was colonizing Rwanda and hired British miners who were working in gold mines in Kenya to help them setting up extraction structures. The two Greek brothers who owned the exploitation license joint ventured with Georges Ismael and Michael Moses, an Iranian and Iraqi investors respectively and created the Kagera Mines, a company that was formed in nearby British Uganda to manage the newly discovered mines. However, the World War I broke out before starting actual extraction (MINIMART, 1987).

In 1909, Mr. Meyer, a German geologist also started prospection of minerals in Rwanda, a province of the *Deutsch-Ostafrika (*German East Africa) colony (MINIRENA, 2013a) but commercial mining was launched by Belgians in 1920s after they have taken over Rwanda following the defeat of Germany in World War I (Mushimiyimana, 2016).

After the defeat of Germans, the Belgian government sent in 1918 Chanoine Achille Salé, a geologist from the University of Leuven to carry out mineral exploration in Rwanda. Mr. Salé drew the first Rwanda geological map that is still in use today and identified cassiterite reserves especially in eastern and central Rwanda (MINIMART, 1987). Following this information about availability of minerals in Rwanda, two Belgian Banks, Société Générale and Banque de Bruxelles jointly created the Ruanda and Urundi Tin Company (MINETAIN-Société des Mines d'Etain du Ruanda-Urundi)[22] in 1925 (MINIRENA, 2009). MINETAIN exploration license covered the entire territory of Rwanda with a clause of releasing 200,000 hectares every year. MINETAIN hired an

[22] Before the 1st July 1962, the date of independence of both Rwanda and Burundi, the two countries were written by colonial administration as Ruanda and Urundi respectively. The current orthography (Rwanda and Burundi) was reintroduced after independence to match the pronunciation in local languages.

American geologist, John Newport who explored the eastern part of Rwanda but also in the Central Rwanda in Gatumba where Mr. Salé had identified considerable cassiterite deposits. MINETAIN got the exploitation license for these mines and later acquired mines in western Rwanda owned by La Minière des Grands Lacs, a Congo-based mining company that had got license to operate in Rwanda but discovered reserves that they considered less important (MINIMART, 1987).

When it became clear that Rwanda has considerable mineral deposits, another Belgian company, Compagnie du Kivu, operating in eastern Congo since 1914 got a license to explore minerals in Rwanda and created a subsidiary in 1931 in Rwanda and Burundi called SOMUKI (Société Minière de Muhinga et Kigali/ Muhinga and Kigali Mining Company) to carry out activities of exploration and mining in Rwanda (Mushimiyimana, 2016). SOMUKI geologist Mr. Ferdinandi established his base in Rutongo near Kigali. Rutongo mines revealed to be the richest and most important tin reserve so far discovered and is the biggest mining concession today (Nishiuchi & Perks, 2014).

After Belgians take over, the Gargarothos brothers tried in vain to get a renewal of their license to continue operations in their discovered mines. They later used Michael Moses friendship with the Governor of Ruanda and finally got a license in 1939 to exploit their mines in Rwinkwavu and hired Ridell and Gastrell, two British settlers in Kenya to lead their mining operations. However, they failed to maximize the production according to Belgian set standards, thus Rwinkwavu mines were put under caretaking of a Belgian engineer from Kilo-Moto mines in Congo who transformed them into the most productive mines in Rwanda. Due to lack of knowledge of Belgian laws, Michael Moses and Gargarothos Brothers decided to sell their license to GEOMINES, a Belgian company

based in Manono, Congo and the latter created a subsidiary known as GeoRwanda (MINIMART, 1987).

During the World War II, the Belgian Government stopped issuing exploration licenses and entrusted all mineral explorations to MICORUDI, a public agency to explore minerals in Rwanda and Burundi. After the World War II, COREM, a joint venture company was formed by public capital and private capital from existing mining company to exploit mines discovered by MICORUDI. COREM carried out mining operations until 1970 when it was liquidated and its assets and mines transferred to *Société Minière du Rwanda* (SOMIRWA) when it was created in 1973.

In 1946, Van den Branden, a Belgian Company acquired SOMUKI. In 1972, it acquired MINETAIN whereas the acquisition of GEOMINES the mother company of GeoRwanda was concluded in 1973. After Van den Branden finished to group together all colonial mining companies, it joint ventured with the government of Rwanda to form SOMIRWA in 1973 (MINIMART, 1987). The creation of SOMIRWA intervened in the period of financial crisis in Europe that affected cash flow of colonial companies operating in Rwanda.

In 1940, Mr. Marchall, an engineer of Union Minière discovered wolfram mines in Gifurwe in northwestern Rwanda at the eastern bank of Lake Burera and got the license to exploit these mines until 1976 when his mines were acquired by SOMIRWA. Stinghlamber, the director of Marchall mines also discovered another wolfram mines in Bugarama, at the northern bank of Lake Burera and got license to exploit them in 1953. Stinghlamber mines became important during Korean War due to their high and consistent production. They were never acquired by SOMIRWA until its liquidation in 1987 (MINIMART, 1987) and are to date owned by his heirs under New Bugarama

Mining company. There were other small individual private colonial miners whose total number was 22 by 1967 when the post-independence government reviewed colonial era issued mining license. The mining concessions of these companies and individuals were scattered across the entire Rwandan territory (MINIRENA, 2016).

According to authors of Rwandan minerals plan, the first Rwandan mining boom corresponded to the World War II period followed a period of Europe reconstruction that needed a lot of minerals. The need for armament and other scientific and technologic research as the effort of war triggered the need of minerals such as tin and tungsten especially in countries far away from the main battlefields. In this regard, mines in Rwanda benefited from this boom. The boom continued as wars followed one another until the end of the Korean War. In this period Rwanda increased production of some minerals such as lithium and production was later abandoned when the market become volatile (MINIMART, 1987).

5.1.2 Post-independence mining

The post-independence mining operations in Rwanda started in 1966 when the Government intervened for the first time in this sector. This period was characterized by the emergence of state owned enterprises that suffocated the private sector. In this regards, SOMIRWA replaced all colonial companies. Another trait of this period is an attempt to add value to minerals in the spirit of industrialization and increase export revenues. The third trait is the coming into power of artisanal mining that were created to subcontract mining activities and the nationalization of mining sector by the creation of REDEMI.

5.1.2.1 SUPPORT TO ISI AND SOES

After Belgian colonization ended in 1962, the new authorities relied for a while on foreign mining companies but started devising means to have a grip on mining sector.

Therefore, in 1966, a review of concessions was started and ended in 1971 with the nationalization of some unexploited parts of mining concessions. At that period, most newly African independent states embraced the state-led economy whereby state-owned enterprises run most of the national businesses. African countries chose the industrial policy based on import substitution whereby other non-manufacturing sectors were heavily taxed to finance the manufacturing side[23]. The policy by then was to use the state owned enterprises to manufacture goods that would substitute imported manufactures (Mantz, 2008; Nishiuchi & Perks, 2014). This led to increased poverty in the agriculture sector and the collapse of the purchasing power of farmers and ensuing poverty (Golooba-Mutebi, 2013). Therefore, the ordinary citizen could not afford buying locally made manufactures that were more expensive than imported goods though deemed of low quality. Due to limited expertise and excessive subsidies, the state owned enterprises collapsed when the donors refused to inject more money in these ineffective and inefficient structures (R. Cook et al., 2014).

After the independence, the new government reorganized the mining sector and this was in line with the widespread industrial policy in Africa. At that time, there were main 4 mining companies owned by foreigners and 22 individual miners who were also foreigners. The excess land that were not properly used was nationalized whereby 1,373.96 km^2 equivalent to the size Kibuye, one of the 10 administrative Prefectures were recovered and made public property (MINIRENA, 2016). The fear of companies to be

[23] This policy partly explains why Rwanda participated in SOMIRWA and why a tin-smelter was built even if the feasibility study pinpointed at some factors that would lead to its unprofitability. This type of industrial policy revealed to be a nightmare to African economies and was abandoned in 1984 when many African countries were financially distressed and put under structural adjustment programs by the World Bank, the IMF and other lenders led by the Paris Club (see for example Heidhues & Obare, 2011; Johnson, 2006; Noorbakhsh & Noorbakhsh, 2006)

nationalized led to less investment in their mines; and the failure of the industrial policy led to the collapse of government owned enterprises which in combination resulted into decline of the mining sector and its collapse in 1984 (Malunda, 2012; MINIRENA, 2016).

Table 1: 1971 Reorganization of concessions

Company	**Starting operations date**	**Size of the concession before 1971/ hectare**	**% of national mineral output in 1971**	**New concession size after license update/ hectare**	**Size of the area nationalized/ hectare**
MINETAIN	1929	197,9247	66	70,024	99,777
SOMUKI	1933	13,881	5	11,00	2,881
GEORWANDA	1939	10,625	4	7,433	3,192
COREM	1948	41,057	15	14,353	26,704
Private Individual miners	Various	24,933/10,209[24]	9	8,167	4,842
Total		**288,423**		**99,977**	**137,396**

Source: Own compilation from 1987 Rwanda Mining Plan data.

After the independence, the new government cancelled licenses issued by colonial administration and issued new licenses based on national law. In this process, the government managed to nationalize all inactive and underexploited concessions which amounted to more than a half of the previously held concessions. According to the above table, the total concession size reduced from 288,423 hectares to 99,977 hectares. MINETAIN, the then biggest mining company per output and concession size retained

[24] In 1971, only 10 individual mining license holders were willing to continue their operations. 12 abandoned their concessions. Thus, 10,209 hectares represent the size of concessions held by those who wished to renew their licenses.

44% of its previous concession, SOMUKI, the second largest retained 79% of its previous concession, while COREM and GEORWANDA remained with 35% and 70% respectively of their concessions held prior to the 1971 mining reshuffle. The independent miners retained 60% of the surface they applied for (MINIMART, 1987, p. 51).

In 1973, following financial difficulties in Belgium due to the crisis that followed the oil crisis and the commodity crash of 1970s, the owners of different mining companies (who were Belgians) were forced to restructure their activities and they invited the government of Rwanda to joint-venture with them in forming a giant monopoly mining company that would be able to drive mining activities in Rwanda. In this regards, a new public mining company, *SOMIRWA* was created, and pulled together all existing private mining companies. The Government of Rwanda held 49% of the shares whereas the rest was owned by private capital from Belgian investor (Van den Branden) who formerly owned all the active private mining company, but the new formed company, SOMIRWA, was run by the government with technical support of foreign experts. This company was a kind of monopoly in mining sector because it was exploiting all mining deposit except one wolfram concession that belonged to Stinghlamber. SOMIRWA managed to increase mining output in 1970s but started having problems in early 1980s. The key minerals produced and traded by Rwanda at that time were cassiterite (tin), coltan (niobo-tantalite), wolframite, amblygonite, gold (relatively in small amount) and some gemstones like tourmaline and amethyst.

5.1.2.2 MINERAL VALUE ADDITION: THE TIN SMELTER

SOMIRWA and the government of Rwanda went further and built a smelter in 1981 to add value to tin and increase export revenues. However, the smelter revealed to be a nightmare as it collapsed just after 3 years of operations. It was operating at 29% of

its capacity throughout that period. The tin smelter started operations in 1982 and stopped functioning in 1985 after processing 4,190 metric tons of tin (MINIMART, 1987). Not only it cost more than the double of the anticipated costs but also functioned under capacity as it did not manage to import cassiterite from Congo to top up local production. The smelter had the capacity of processing 3,000 metric tons per year with a daily capacity of 10.9 metric tons. Rwandan average annual tin production was oscillating around 2,000 metric tons per year while the break-even point for the smelter to be profitable was 2,500 metric tons per year (MINIRENA, 2016). Therefore, at its creation, there was plans to import at least 500 metric tons of tin from eastern Congo to fill the gap as the nearest Congolese smelter was located in Manono far from Kivu provinces where Rwandan smelter expected to import cassiterite.

Before its collapse, the smelter lost financial support from UNDP and other external donors in the framework of stopping subsidies under structural adjustment programs (R. Cook et al., 2014). The smelter closed its doors in 1985 mainly due to the accumulation of three factors namely high cost of production due to unexpected increase in electricity tariffs and other costs not anticipated in the feasibility study, functioning under capacity at 29% due to national decreased production, failure to import cassiterite from eastern Congo, and high fluctuation of international prices (MINIMART, 1987). These three factors were exacerbated by the inability to cushion the loss by subsidies either from government or other partners.

The question that arises is to know why the government and its development partners approved the establishment of this plant. There are two plausible reasons why the government of Rwanda approved the construction of this plant. Firstly, the feasibility study misled decision makers and available skills could not allow to detect serious

omissions that revealed to be critical to the functioning of the smelter. It is to be noted that at that time, only foreign companies (Western companies) carried out such feasibility study. Rwandans had no skills to conduct such a study. Omissions in the feasibility study such as high cost of electricity could have been overcome by increasing productivity to cushion losses occasioned by this cost. However, the second reason is that at the creation of the plant, it could not be foreseen that the smelter will be unable to import cassiterite in Congo as it had been anticipated. The inability to import cassiterite from Congo could be explained by shortage of funds resulting in policy change from donors who forced government to stop subsidizing public enterprises (Shah, 2013). On the side of development partners, I guess it was not easy for them to reject a study conducted by companies from their countries. In addition, they also lacked skills to anticipate all omissions in the study. Besides, when beneficiary countries insist on projects, most of the time international donors yield to their request. Even today, similar shoddy projects are not rare in developing countries. Issues related to some omissions in feasibility study could have been corrected if the smelter had enough funds to buy enough minerals to be break even.

5.1.2.3 DEMISE OF SOMIRWA AND REORGANIZATION OF ARTISANAL MINING

The foreclosure of the tin smelter sounded the knell for SOMIRWA that also filed bankruptcy in 1987. SOMIRWA had put forward the tin smelter as its flagship project. The demise of SOMIRWA was also due to the collapse of international market prices of tin on which SOMIRWA was heavily relying. In 1985, the International Tin Agreement, an organization that was the custodian of international tin trade and the regulator of tin prices collapsed. The fall of the International Tin Agreement happened after several years of bad tin market was due to the introduction of aluminum containers, the use of polymer

lacquers as protectors inside cans and proper recycling technology. In 1985 there occurred the liquidation of the International Tin Agreement and this led to the 45% cut of tin price in the following year (Mallory, 1990).

The demise of SOMIRWA has various consequences on Rwandan mining sector. SOMIRWA itself did not carry out extractive activities but subcontracted different associations and cooperatives of artisanal miners and limited its role to technical support to the mining cooperatives, buying and exporting minerals. This had serious negative impact on Rwandan mining as it limited investment in this sector. After SOMIRWA demise, the artisanal miners were left disorganized until 1988, when they were grouped into a national cooperative, COPIMAR (Coopérative de Promotion de l'Industrie Minière Artisanale au Rwanda) to assist small mining artisans to develop and increase their production. The collapse of SOMIRWA also led to the emergence of third party buyers sometimes without proper licenses. After 4 years of discussions between the government of Rwanda and its development partners on the fate of the mining sector, the government took a decision to nationalize all mining concession and trusted them to a government mining agency known as Régie d'Exploitation et de Développement des Mines (REDEMI).

5.1.2.4 CREATION OF REDEMI

In 1989, REDEMI, a government agency, was put in place to promote, coordinate, develop and spearhead mining activities. REDEMI immediately started exploitation of mining concessions and kept using artisanal miners grouped under COPIMAR as subcontractors. This went on until the 1994 genocide against Tutsi halted its operations.

In 1992, IMF added voice to other development partners and requested Rwanda to liberalize the mining sector but Rwanda was amid a serious civil war and needed a sure

source of income that REDEMI could easily provide (Perks, 2013). The civil war had broken out in 1990 and slowed down mining activities until they were halted during the 1994 genocide against Tutsi. Mining activities were later resumed after the new government was put in place but REDEMI kept struggling due to lack of adequate infrastructure and human resources as they had been destroyed by the four year war and the 1994 genocide (MINIRENA, 2016). REDEMI was dissolved in 2006 with the privatization of mining concessions.

Here, it worth recalling that Rwanda laws provides that all mineral deposits belong to the State (Republic of Rwanda, 2014). The exploration and exploitation are done after proper licenses by competent organs. Thus throughout this mining history from colonial era to post independence period, it worth bearing in mind that all mineral concessions belong to the state and can be awarded to or taken away from the mining license holder if the state deems it necessary.

To wind up this period, one would argue that the period of 1970s-1980s was a hard year for Rwanda in general and the mining sector in particular due to the following four reasons: firstly, there was a sharp decline in the international commodity price for coffee which was by then the main export commodity for Rwanda; secondly the tin market crash in early 1980s led to slow down of Rwandan mining and later to its decline (in the first years of the crisis, Rwanda increased production to cushion low prices but ended up giving up). Thirdly, there was aid crisis due to failure of privatizing SOMIRWA as suggested by the European Economic Community and the World Bank. The government resisted requests for privatization under pretext that SOMIRWA was supporting the rural development (Perks, 2016). Lastly, there was abrupt halt of social services by the state partly due to the implementation of the structural adjustment program

conditionality and luck of funds and this exacerbated financial difficulties and failure to make necessary investments to modernize mining sector.

5.1.3 Post-genocide mining

This subsection on post genocide mining discusses the resumption of mining sector after the war and genocide that befell Rwanda and halted mining activities, the resumption of the privatization process, the allegation of Congo minerals traded by Rwanda and the cross-border trade that prompted the conflict minerals provision and the Dodd-Frank mining era.

5.1.3.1 RESUMPTION OF MINING ACTIVITIES AFTER 1994

After the 1994 genocide against Tutsi ended, the new regime in Rwanda started rebuilding the country. Mining was one of the shattered economic sectors due to high level looting (MINIRENA, 2013a). Almost all moveable equipment and stock had either been destroyed or plundered. The immoveable infrastructure had also been severely damaged by the four year war and the genocide. Towards 1995, REDEMI resumed activities to spearhead rehabilitation and rebuilding of mining sector. REDEMI re-launched some mining concessions and at that time minerals export was almost the only commodity that can be exported because at that time tea and coffee plantations and factories were waiting to be rehabilitated. REDEMI struggled to perform its activities as there was not enough money to invest or at least repair the damaged infrastructure. Thus, it was imperative to cede the mining activities to private operators who could mobilize the needed investment. In addition, individual miners had took advantage of REDEMI disorganization to start fraudulent mining especially in abandoned concessions as there were not adequate system to prevent such activities (Perks, 2013).

In 2001, Rwandan mining started showing signs of recovery where minerals export constituted 45.7% of total exports (MINIRENA, 2016). This high contribution can also be explained by the fact that at that time Rwanda was not exporting anything due to damages left by the genocide. Almost the export sector previously dominated by coffee and tea had collapsed. In that year, minerals earned $42.6 million whereas total exports were $93 million (Mushimiyimana, 2016).

5.1.3.2 RESUMPTION OF PRIVATIZATION OF RWANDAN MINING CONCESSIONS

Privatization was a continuation of the liberalization process, a component of structural adjustment programs package. Privatization also aimed at rebuilding the sector seriously affected by the genocide and needed a lot of investment that the government could not immediately mobilize. It was also in line of adhering to international mining standards. Rwanda wanted to be a private sector-led economy (MINECOFIN, 2000). Privatization had been considered since 1980s but the then government was skeptical of the fact that opening mining and minerals export to private sector would lead to the best output of the mining sector (Perks, 2013). Rwanda's development partners had advised that privatization would enhance economic management and was first suggested by European Economic Commission delegation in 1984 in their discussions with the government of Rwanda (Perks, 2016). This proposal was later reiterated by the World Bank delegation in 1987 amid mining crises when both sides were discussing relief to Rwandan economy. At this period of mining sector under SOMIRWA (a monopoly) was in limbo and run bankrupt in the same year. According to what was known by then as Washington consensus[25], the role of the state in liberalized mining industry is limited to

[25] This concept coined by John Williamson in 1989 at a conference on Latin America's growth is comprised of 10 points namely fiscal discipline, reordering public expenditure priorities, tax reform, liberalization of interest rate, a competitive exchange rate, trade liberalization, liberalization of inward

awarding contracts and licenses to successful bidders, regulating and monitoring operations in the industry, collecting taxes and royalties and redistributing and managing revenue as well as implementing sustainable development policies and projects (Alba, 2009).

In 1996, the government of Rwanda set out a privatization plan and a secretariat was put in place to drive the privatization process not only in mining sector but for all government enterprises that had been earlier identified as eligible for privatization (MINIFOM, 2010). The process took around 10 years to conclude and privatization of mining sector was closed with the liquidation of the government agency, REDEMI that was in charge of running all the mining concessions in Rwanda. In 2005, Privatization of government enterprises has taken shape and privatization of mining sector was discussed. In 2006, the law establishing REDEMI was repealed and its 24 held mining concessions including the six main active concessions were successfully leased out to private companies (MINIRENA, 2013a). However, the government retained some minority shares in two of the six concessions namely Rutongo and Gatumba concessions. Since 2000, there was a coltan boom on the global market, therefore many foreign companies bid for these concessions were driven by this boom (Perks, 2013). It is also justified to think that most of them were not only attracted by the potential of Rwandan minerals but also the availability of Congo minerals on the market with low investment.

In fact, many of these companies did not immediately invest in developing their newly acquired concessions but rather they used them as bases in their cross-border business in Congo minerals (Levin, Cook, Jorns, & Roesen, 2013). In this period, mining

foreign direct investments, privatization, deregulation and enforcing property rights (Williamson, 1990).

in Rwanda largely became trade-based business not extractive. According to the interview I had on 25 February 2016 with the Deputy Director General of RNRA in charge of Geology and Mining, soon after the privatization of Rwandan mines and liberalization of the mining sector, many people including foreigners registered mining companies in Rwanda but only few of them carried out mining activities[26]. Most of them opened sales counters in cities contiguous to Rwandan border in eastern DRC[27] where they bought minerals from artisanal miners and other individuals such as middle men and brokers.

It was easy for these companies to change the origin of the minerals bought in Congo as Rwanda law at that time "allowed foreign minerals to be exported as 'Rwandan origin' if more than 30% value is added in the country"(Garrett & Mitchell, 2009a, p 8; Teeffelen, 2012, p. 29). According to Hildebrand Kanzira, Director of Research Geology and Mines Department (GMD) quoted by Teeffelen (2012), "trade in Congolese minerals was a big industry before. Now [with the Dodd-Frank legislation] it's no longer possible." (Teeffelen, 2012, p. 29). It is however to be noted that mineral trade data between DRC and Rwanda from 2000 to 2010 when Dodd-Frank was issue is clearly under-reported in both countries Rwanda and DRC as imports and exports respectively (Garrett & Mitchell, 2009). Garret and Mitchell explain this problem of trade statistics by institutional under-capacity and suggest that cross-border mineral trade data should be understood as only a "view of the trade, rather than an authoritative depiction" (p. 29).

[26] Interview of 25 February 2016 with Professor Michael Biryabarema, Former Director General of the Office of geology and Mines and Deputy Director General of the Rwanda Natural resources in Charge of the Geology and Mines Department (GMD).

[27] Belgian administration created contiguous cities at Congo-Rwanda border where Goma in North Kivu/DRC is contiguous with Rubavu in Rwanda whereas Bukavu in South Kivu is contiguous with Rusizi in Rwanda. While Bukavu and Rusizi are separated by Ruzizi River, there is no natural geographic feature separating Goma and Rubavu cities.

Even though the Rwanda Investment and Export Promotion Authority (RIEPA) had approved US$55 million worth of investment projects in 2006 (Garrett & Mitchell, 2009), involvement of Rwanda registered companies in cross-border trade affected Rwandan mining sector as almost no investment was done in the privatized concession in this period. It is after section 1502 of Dodd-Frank that the OGMR and later GMD put in place new regulations, increased supervision and started collecting data on investment in Rwandan mining concession that the owners of the concessions started investing and increasing their daily output (MINIRENA, 2016). With privatization, the Rwandan government hoped and still hopes that mining would be one of the key pillars of economic development. According to EDPRS II projections, mining share in GDP would grow from 1.3% to 5% in 2020 and revenues grow to $500 million in 2018. Currently, the contribution of mining to GDP oscillates around 3% while revenues have stagnated and started decreasing in the last two years (MINECOFIN, 2017a).

5.1.3.3 ACCUSATIONS OF TRADING IN DRC MINERALS AND CROSS-BORDER TRADE

As discussed in the chapter 3, Rwanda was accused to have exploited DRC minerals in violation of international norms during its military occupation of eastern Congo between 1999 and 2003. Rwanda was also accused to have collaborated with some armed groups operating in eastern DRC after the withdrawal of its forces in 2003. It is however worthwhile that the volumes and revenues of Rwanda from Congo minerals are not known as all researchers on this issue just use estimates. They do not appear in any official reports of Rwandan exports in these years of occupation. After Rwandan troops withdrew from Congo, trade activities across borders continued and increased after Rwanda has liberalized its mining due to the increased number of mining companies that acquired mining licenses (Shenaz Hossein & Brenton, 2011).

The privatization of mining in Rwanda increased cross-border minerals trade and exacerbated accusation against Rwanda. Before privatization, only REDEMI was allowed to carry out mining and mineral trade business in Rwanda (MINIRENA, 2016). After it was liquidated, different private mining and mineral exporting companies got licenses to operate in Rwanda. Some companies that acquired the main mining concessions previously exploited by REDEMI focused on their exploitation without major investment, this is the case of TINCO in Rutongo and Nyakabingo and Wolfram mining and Processing limited in Gifurwe (Weldegiorgis & Ali, 2016), whereas some other companies that either got small concessions or just licenses to prospect and research mining shifted their activities to buying minerals from DRC (Parker & Vadheim, 2013). This was also done by almost all the minerals exporting companies.

As mentioned in previous sections, cross-border trade was characterized by opacity whereby information about what was happening is not accurate and some scholars have interpreted it as cover up to illegal exploitation by armed groups and other unauthorized actors (Global Witness, 2013; Polinares, 2012). According to calculations from UN Comtrade data, in 2005 Rwanda imported minerals from DRC worth US$ 2.5 Million, US$3.15 in 2006 and US$2.6 million in 2007 (https://comtrade.un.org/)[28]. However, Rwanda reported no imports from Congo in these years but registered some transiting minerals from DRC. The explanation of Rwanda is that when there is no transformation of at least 30%, minerals are registered as transiting by the Rwanda Revenue Authority. However, Garret and Mitchell identified that, in 2007, Rwanda exported 4,282 metric tons of tin whereas official production data showed that Rwanda

[28] This data is also found in details on http://www.tradingeconomics.com

had only produced 1,141 metric tons of cassiterite which means an excess of more than 3,000 metric tons of cassiterite (Garrett & Mitchell, 2009a, p 39). It is worth noting that processing of minerals to the required quality standard of at least 65% of metal concentration means that at least 25% of the weight is lost[29] and therefore that Rwanda might have imported more tin to reach 3000 metric tons of processed tin ore. Regarding export figures, Garret and Mitchell found out that DRC customs officials in North and South Kivu reported the export to Rwanda of 1,068.8 metric tons of cassiterite. As mentioned above, this points to the problem of institutional incapacity. On the one hand, nothing is reported in Rwanda, on the other, volumes are underreported in DRC. This difference in official production and export figures exacerbated suspicions and accusations against Rwanda that it covered up imports of minerals of dubious origin (Garrett & Mitchell, 2009; Usanov et al., 2013).

Eastern DRC mining being mainly artisanal, and having been monopolized by pro-Mobutu buyers for many years before the Congo wars[30], after the fall of Mobutu, new mineral sales counters (comptoirs) were established in cities of Goma and Bukavu, that are at the western border of Rwanda, by Congo business people and foreign buyers who were attracted by easy transport and low taxes in Rwanda, where they routed minerals they bought from Congo (Garrett, 2007; Tegara & Johnson, 2007). Other buyers established their buying counters in contiguous cities of Gisenyi and Rusizi on Rwanda

[29] The process of increasing metal content concentration from 30-35% to 65% required for Rwandan metal export involved separation where the initial quantity reduces because some waste are taken out. This means that if a Rwandan trading company imports from DR Congo a consignment of 1000kg of minerals with 35% concentration of ore content, when it is processed to reach the required 65% of metal concentration, 250kg of waste will be removed. The Rwandan trader will remain with a consignment of 750kg of at least 65% of metal concentration the rest being the waste that is separated through smelting.

[30] According to Garrett (2007), president Mobutu vandalized the Zairean economy and created patrimonialism. His government favored companies that had economic connections with Mobutu relatives and friends and artisanal miners were selling minerals to the comptoirs owned by people with proximity to Mobutu regime.

side (Keenan, 2014). At that time, though there were some UN resolutions condemning the plunder of the DRC minerals, nothing was preventing people from buying minerals across the border if they believed that they were buying from genuine miners especially that mining in eastern Congo is essentially artisanal where individual persons sell their proceeds to sales counters (Geenen, 2012). However, the UN investigation team established that armed groups in eastern Congo were benefiting in this trade either by taxing artisanal minerals by exploiting mine deposits themselves and selling the proceeds to the selling points (UNGoE, 2011). Between 2005 and 2010, Rwanda based mining companies were legally importing metals for re-export from eastern DRC. Outside the official import figures, there are some reports that some minerals were smuggled and mixed up with legally imported ones as there were no certification requirement at that time (Garrett & Mitchell, 2009).

Four years after Rwandan mining privatization and liberalization, a review was conducted and identified different gaps including in obsolete mining policy. It thus triggered the preparation of the new mining policy that would emphasize on extraction rather than on cross-border trade (Perks, 2016). This coincided with the international outcry about Rwanda based mining companies that were accused of facilitating illicit trade of Congo minerals connected to armed groups that were committing grave violations of international law. The drafting of new mining policy coincided with the publication of Section 1502 of Dodd-Frank Act instituting the conflict minerals provision.

5.1.3.4 DODD-FRANK MINING ERA

Anticipating the imminent adoption of Dodd-Frank's conflict minerals provision, Rwanda speeded up the adoption of the new mining policy to better manage concessions, adopted different laws and regulations. Before Dodd-Frank Act, there was no record

keeping in Rwandan mining sector. The need to comply with Dodd-Frank rendered registration of all mine sites and record keeping mandatory to be able to fight fraud. The advent of Dodd-Frank Act also brought transparence in mining sector and availability of information related to minerals trading; and this opened doors to investors who could easily venture in mining knowing risks involved unlike before when the sector was opaque and monopolized by few foreign based firms. All these elements resulted in the increase of mining licenses awarded by the government to individuals or companies who wanted to invest in mining sector. The following figure shows how the mining licenses evolved between 2006 and 2014.

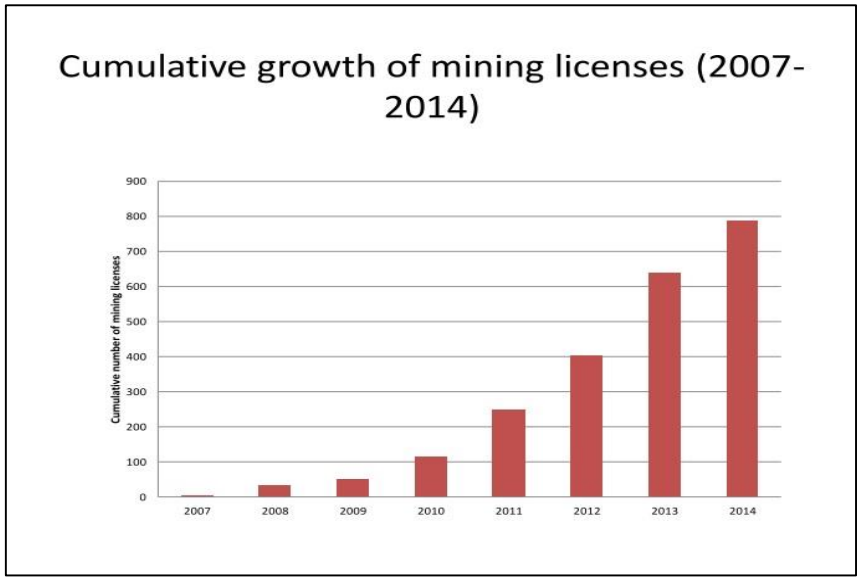

Figure 3: Growth of mining licenses from 2007 to 2014

Source: MINIRENA, Unfolding Rwanda Mining Sector

According to the above figure, the number of mining licenses kept growing following reforms that were carried out. In 2007 immediately after privatization, there were only 6 licensed mining companies, in 2010 they grew to 110. The number multiplied seven folds and reached 780 licenses in 2014. All these licenses are held by 416 mining companies (MINIRENA, 2016). This is due to the fact that many artisanal miners were

empowered and gained capacity to put in place their own companies but also the 2014 mining law reduced the size of concessions and this increased the number of licenses. It is allowed for a company to hold many licenses especially when it was the former owner of the concession before the law reduced its size. It is worth noting that one mining license can encompass many mining sites. In this regards, PACT, the local supervisor of ITRI supply Chain Initiative (iTSCi) has counted 835 mine sites in Rwanda by the end of 2015 (Pact, 2015). Regarding trading licenses, by 2014, the ministry in charge of trade and industry (MINICOM) had issued 86 mineral trading licenses which include 26 exporting licenses.

Since 2014 with the new law governing mining and quarrying in Rwanda, mining companies are divided into large scale and small scale companies and artisanal depending on the size of the concession, mineral reserve estimates, monthly production and the investment required (Republic of Rwanda, 2014). Large scale companies most of the time also double as exporters. They practice dual extraction models where by part of extraction is done by employees on the payroll of the company whereas for another part, companies rely on subcontracting co-operatives or teams of artisanal minerals. The latter have loose contractual relationship with the company. Their sub-contract include that they do their maximum to get as many metals as possible whereas the company provides equipment, technology and ensures to buy whatever they get. They are paid on the quantity of metal ore collected. Companies have pre-sorting plants where some washing, separation and processing is done before bagging and transportation to the capital where minerals from different mine sites are put together, processed and packed for export. In general, companies use subcontractors in open shafts that do not require a lot of investment except some light equipment to blast the rocks. The underground tunnels that need electrification

and semi-mechanization are usually run by company's employees. Small scale miners on the contrary are done by cooperatives or personal enterprises that rely on middlemen to buy their produce. They play a big role in Rwandan mining sector as they represent 40% of total production and hold more than 350 licenses (Perks, 2016).

In most cases, minerals extracted are bought from the concession either by exporters or by middlemen who sell them to exporters. By 2015, mining was the second largest foreign exchange earner after tourism and contributes around 30% of total export revenues (MINIRENA, 2016). The Rwanda Economic Development and Poverty Reduction Strategy 2007-2012 (EDPRS I) target was to raise revenue from $38 million to $206 million, an increase of 250%, and employment in the sector from 25,000 persons to 37,000. These targets were met by 2011 where revenues from minerals stood at $158.4 million (MINIRENA, 2016). However, Perks (2016) citing the Minister of State in charge of Mines suggests that mining sector in Rwanda produces under capacity at the rate of 20% of its full potential (Perks 2016, p 330). The reason for this under capacity production can be found in the explanations of Kanyangira (2013) who argued that Rwanda mining sector had always relied and still relies in large part to artisanal miners. He reiterated that in 2012, artisanal miners contributed around 70% of the total output including the production of large scale companies that also subcontract artisanal miners (Kanyangira, 2013, p.4).

It is worthwhile noting that artisanal miners are subcontracted by concession owners for extraction and Rwanda does not have any near future plan to replace artisanal mining by industrial mining. Instead, the plan is to increase artisanal miners from current 37,000 to 56,000 by 2020 but increase their skills and to give them appropriate tools and technology that enable them to increase their productivity (MINECOFIN, 2017b). In this

regard, Rwanda is supported by BGR to streamline artisanal and small scale mining. Today, artisanal miners work seasonally and alternate from mining and agricultural activities (NBM, 2016) but the plan is to make artisanal mining a profession and this not only constitutes incentive to increase their productivity but it also helps companies that subcontract them to have reliable and skilled labor (MINIFOM, 2010).

As mentioned in the above paragraphs, Dodd-Frank help to bring back to extraction activities companies that had concessions but were using them as a name to trade in Congo minerals. Resuming extraction activities in their licensed concessions increased employment of artisanal miners and local production (MINIRENA, 2016). In addition, a new contracting system whereby artisanal miners are no longer employees of the company but independent subcontractors motivated them to increase productivity as their revenue depends on the amount of minerals they extract. In addition, theft from concessions were reduced to the minimum due to security arrangement by the concession owners and the traceability process that excludes from the market all minerals without tags or eases tracking minerals as tags help to identify the origin of every mineral ore (NBM, 2016). Thus artisanal miners have all incentive to sell all their production to the company owning the concession. Other incentives to artisanal owners are insurances against work hazards and health insurances that the company either pays for the artisanal miners on its concession and construction of other facilities such as health dispensaries that treat injuries and other minor sicknesses (MINIRENA, 2013a). The concession owner also avails some equipment used in mining such as explosives to blast rocks and is responsible for environment protection and rehabilitation after excavation. The concession has are required to have some dispensary to cater for some injuries, accidents and illnesses that might occurs during mining activities.

Some concessions are so big that enclose villages. It is thus a social responsibility of the company to raise the social standards of the village inhabitants such as primary education support and health services to the most vulnerable (Nishiuchi & Perks, 2014).

The following chart shows summarized different phases of mining in Rwanda

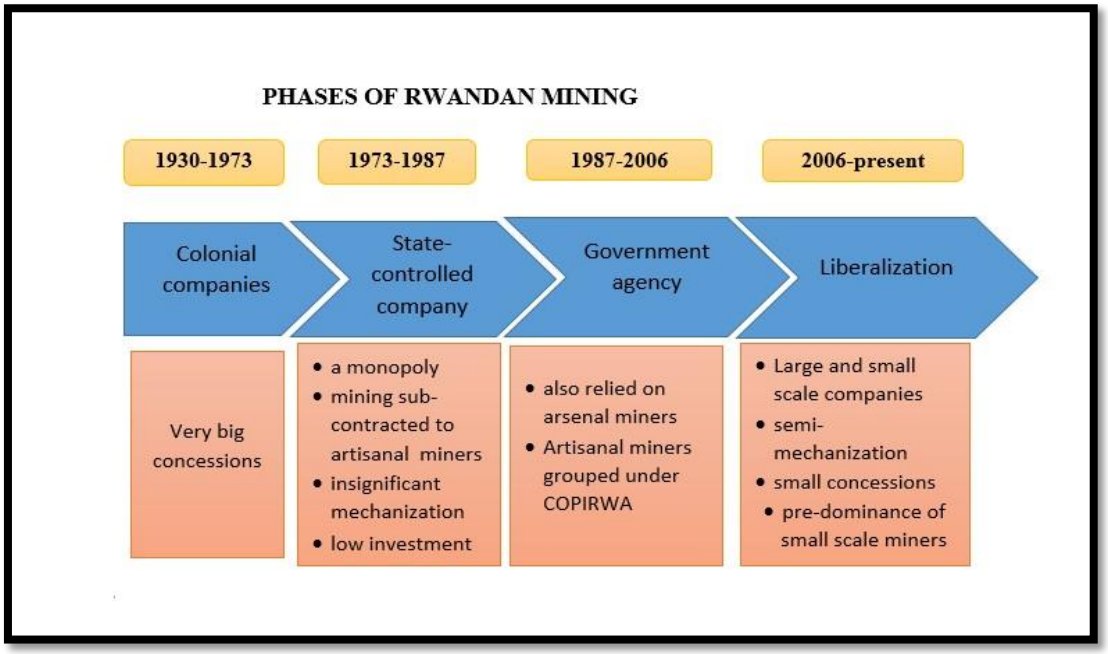

Figure 4: Historical phases of Rwandan mining sector

Source: Own compilation

5.2 Rwanda's Minerals and mining sector structure and characteristics

5.2.1 Types of minerals in Rwandan soil

This section shows some details about minerals in Rwanda before and after the genocide. It shows that while the traditional minerals remained the same, quantities mined increased after Rwanda liberalized its mining sector in 2006.

5.2.1.1 TYPES OF MINERALS MINED IN RWANDA

In early 1980s, Belgian and Germany geologists surveyed all Rwandan territory and compiled a comprehensive report about then then status and potentials of mining in Rwanda in a book known as "Rwanda Mining Plan" (MINIMART, 1987). According to

this report on Rwandan mining industry, whereas mining operations had started some few years back, export of cassiterite produced in Rwanda started in 1932. It reached its 2,990 metric tons in 1942 amid the World War II, a number that was not reached again before 2006 when Rwandan mining sector was privatized. Rwandan cassiterite mining had a boom between 1950 and 1956 during Korean War where annual production was 2,600 metric tons on average. The production fell to 2,000 metric tons in the following years. In 1972 tin production reached 2,239 metric tons and started declining to reach 1,561 metric tons in 1984 the year that is taken as the year of collapse of mining sector in Rwanda.

Regarding wolfram, its extraction started in 1939 and reached 650 metric tons per year between 1953 and 1956 during the Korean War to decline to 100-200 metric tons per year between 1957 and 1965. Wolfram production increased again between 1966 and 1967 and stabilized at 600-900 metric tons per year. The wolfram peak was hit in 1977 at 936 metric tons and production declined to 483 metric tons in 1984. The main mines of wolfram up to today namely Bugarama, Gifurwe and Nyakabingo were opened between 1942 and 1959 (MINIMART, 1987).

Niobo-tantalite production also started in 1939 but in a modest way. It was mined along with cassiterite in the mines located in the Western part of the country then was mined separately later. The production shoot up during Korean War to reach 1,000 metric tons of concentrate ore by 1956. It then significantly decreased to 20-30 metric tons per year in 1965-1973 to slightly increase and reached 85 metric tons in 1975 due to good international price and stabilized at 50-60 metric tons per year in the following years. In 1984, tantalum production was at 52 metric tons per year.

Rwanda used to also produce some beryl in artisanal way. It production once reached 380 metric tons per year in 1970 and declined to 44 metric tons by 1984. Today, the exploitation has stopped. In 1959, Rwanda also produced 2,690 metric tons of lithium but due to serious market price fluctuations, the production stopped in 1984.

Regarding gold, it was explored on Rwandan territory since 1900 but the extraction started in 1930 by MINETAIN. The production crossed 900 grams in 1938-1940. Due to decrease in density and serious fraud and theft, production significantly decreased. It once reached 63 kg but due to fraud, it is difficult to know the exact amount of gold produced in Rwanda (MINIMART, 1987).

High fluctuation of minerals volume according to the market boom showcase that Rwanda has reliable mineral reserves but colonial mining policy at that time was only motivated by gains from minerals rather than strengthening mining sector and making it resilient to market price fluctuation. Today, Rwandan government is exploring ways of reopening exploitation of some minerals that are no longer extracted such as beryl and lithium and in order to diversify mining products (Munyaneza James, 2017).

5.2.1.2 QUANTITIES MINED AND MINERAL REVENUES FROM 1958 TO 1985

Quantity figures presented in below table are the ones reported by the Ministry in charge of mining and artisans, however, there are reasons to believe that the actual production might be above these figures due to misreporting of different concessions or omission of reporting due to fraud. This table shows that Rwanda indeed has a number of minerals and that production was consistent for many decades. In addition to the 3 classic minerals namely tin, tantalum and tungsten, Rwanda also produced beryl and amblygonite which produces lithium. While beryl was consistently produced throughout the period of 1959-1985, amblygonite production stopped in 1967 where the production

peaked at 2690 metric tons in 1959. Rwanda also produced a number of gold quantities but the production was not consistent. The highest gold production peaked at 63 kg in 1977. These are the official figures but there are reasons to believe that there are other quantities that were not declared due to fraud or mis-declaration.

Since 1969, the government reviewed mining licenses where unexploited land within concessions was nationalized. This has some effects as concession owners for the fear of further nationalization slowed down investments. However, low investment was also the resultant of speculation and absence of major discovery of mineral deposit for a long time. Low investment of course resulted in lack of modernization and low infrastructure such as semi-mechanization and enough water systems for pre-treatment.

Table 2: Rwanda mineral production from 1958 to 1984

Year	Cassiterite (t)	Wolfram (t)	Niobo-tantalite (t)	Beryl (t)	Lithium (t)	Gold (g)	Minerals export (US$*) in million	Total export (US$*[31]) in million	% to total export
1958	2,090	230	70	50	80				
1959	1,875	145	60	170	2690				
1960	1,760	420	50	270	1700				
1961	2,035	535	45	475	326				
1962	1,838	252	-	357	369				
1963	1,998	368	20	256	5				
1964	1,883	157	25	286	23				
1965	1,987	222	23	196	138				
1966	1,845	351	22.7	138	80				
1967	2,144	586	33	92	149	1,346	5.29	13.97	37.85
1968	1,889	745	28	152		1,527	5.09	14.67	34.66
1969	2,214	500	30	253			6.01	14.11	42.56
1970	2,148	628	31	299			8.59	24.56	34.98
1971	2,152	695	32	193			8.54	22.13	38.56
1972	2,076	471	35	85			6.45	17.79	36.26
1973	1,965	635	85	96		54	5.94	27.31	21.64
1974	2,210	680	74	83			5.41	32.27	16.77
1975	2,084	758	46	18			6.66	38.18	18.51

* The convertibility of US$1= 100 FRW that was in use in 1990 was used. The original export figures were in Rwandan Francs. Since 1983, Rwandan currency exchange rate was pegged by the presidential order to the Special Drawing Right until 1991 at the parity of 1SDR=102.7RWF when it was first devaluated in the framework of the Structural Adjustment Program spearheaded by the Bretton Woods institutions and other lenders because it was considered too strong to support exports and stimulate growth. (Andre, 1997; The World Bank, 1991, p. 2).

1976	2,180	825	45	46		29,122	7.07	93.91	9.01
1977	2,239	836	64	68		62,719	7.16	83.91	8.52
1978	2,138	714	54	81		34,903	6.07	64.03	9.47
1979	1,910	732	47	86		14,693	5.77	104.21	5.53
1980	2,069	678	60	108		29,390	7.47	68.29	10.94
1981	1,788	521	57	59		37,450	11.12	79.19	14.04
1982	1,655	601	62	69		8,906	2.05	83.81	2.44
1983	1,626	429	50	32		20,822	11.28	72.96	15,45
1984	1,561	482	52	44		8,295	15.06	134.75	11.18
1985	1,161	310	28	27		8,000	13.58	139.25	9.71

Source: Compilation from MINIMART (1987). Rwanda Mining Plan of 1987 (p. 53-55)

In regards to revenues, the table also shows figures from 1967 when the Government of Rwanda started to effectively controlling the mining sector. Before that date, it was totally in hands of colonial companies and the output was included in statistics of the metropolis and are not easy to get. From 1967, a period that preceded the mining crisis that started in 1984, the average contribution of mining sector to Rwandan economy was around 20%. The main foreign currency earners were coffee and tea. The share of mining in total export started declining since 1976 where it is on average at 9%. This does not mean that export revenues diminished significantly but dependency on mining was reduced due to the increase of the share of coffee and tea as main export commodities for Rwanda in mid 1970s (Hintjens, 2006; Malunda, 2012).

5.2.1.3 POST-GENOCIDE MINING DATA

There are no available mining data for the subsequent 13 years from 1986 to 1998 and data from 1999 to 2005 are not reliable. The reason is that just five years after the collapse of the mining sector in 1985, the civil war ensued and it was in the interests of leaders on power not to disclose data related to mining as one of the key sources of funds used to finance war operations on the side of the government. After the genocide, there were no human resources and adequate systems to help in collecting mining data. Besides, the presence of Congo war and the allegation of the use of its resources to finance war operations by Rwanda as one of the belligerents and subsequent accusation by the international community against Rwanda on the plunder of Congo resources might have discouraged disclosing real data about mining related data in Rwanda. Reliable data are available again from 2006 when mining sector was liberalized. This was also helped by the creation of the Rwanda Revenue Authority,

the National Institute of Statistics of Rwanda that systematically collected micro and macro-economic data, and the Central Bank that built capacity to process all these data. The following table summarizes minerals volume and revenue data between 1999 and 2015.

Table 3: Minerals export revenues and volumes between 1999 and 2015

Year	Mineral exports (Metric tons)	Mineral exports(US$ Million)
1995	-	1.50
1996	-	2.30
1997	-	3.80
1998	-	4.70
1999	943.00	6.90
2000	1,012.00	12.60
2001	2,102.00	42.60
2002	2,083.00	15.90
2003	2,599.00	11.10
2004	5,082.00	29.00
2005	6,465.00	37.00
2006	5,995.15	36.57
2007	8,220.98	70.62
2008	7,009.98	91.69
2009	6,093.54	55.43
2010	5,466.35	67.85
2011	8,848.38	151.43
2012	7,531.89	136.07
2013	9,579.22	225.70
2014	10,470.81	203.32
2015	7,281.77	117.81

Source: National Bank of Rwanda, Rwanda mineral export 2006-2015, unedited; and MINIRENA (2013). Mining in Rwanda.

This table shows that minerals volumes and revenues from export of minerals increased from 2001 when they reached the pre-1985 levels. It is worth noting that between 2006 and 2010, a number of minerals exporters were using Rwanda to re-export some minerals imported from eastern Congo. Though Rwanda failed to report re-exports after transformation of minerals imported from Congo, data from Congo customs and export figures from the international market show that Rwanda-based companies have indeed imported some minerals from eastern DRC and exported them as Rwandan origin (Hartard & Liebert, 2014; Roskill, 2009). This can partly explain this increase. The increase can also be explained by some investment, though minimal, made by some mining companies that focused on extraction in their newly acquired Rwandan concessions.

However, there was a remarkable increase in 2011 after Dodd-Frank entered into force and it is not easy to explain this increase. Some people have attributed it to the sellout of earlier-acquired Congo minerals stock in anticipation of the boycott announced by clients for 1st April 2011. They back their claim by the fact that Rwanda sold many minerals in the first quarter of 2011 and less after 1st April (Teeffelen, 2012). Others attribute this increase in maturity of investment progressively done since 2006. However, the plausible explanation can be found in the sharp increase of mining licenses that allowed many new operators in the sector and different policy measures taken by the government as discussed in section 6.5 of chapter 6. Whereas volumes kept increasing and peaked in 2014, revenues shrank in the same

year and significantly fell in 2015 where they fell at $117.8 from the peak of $225.7 million in 2013 a decrease of 48% (R. Cook et al., 2014; MINIRENA, 2016).

5.2.2. Mining sector structure, actors and relationships

The current Rwandan mining sector (2006-present) is divided into mineral producing and trading branch made of private operators, policing, supervision and regulation branch composed of public entities, and the international certification and support branch. Each subdivision has got a number of actors that are bound together by certain incentives and are linked to other branches by a certain working relationship that this section will attempt to clarify.

5.2.2.1 THE PRODUCING BRANCH

This branch is composed of mining companies, transporters, mineral exporters and different local middlemen. Mining companies hold mining licenses and either do the extraction of minerals themselves using their own employees or hire subcontractors. These mining companies vary in size depending on their concession and investment made. In most cases, mining companies subcontract cooperatives or associations of artisanal miners to carry out daily activities of mining. Miners are organized in small teams of 10 to 12 persons with a team leader and this team is in charge of a specific area within the concessions. Different teams are grouped into an association or a cooperative for purposes of collective bargain and enforcement of regulations. These miners are not employees of the company but subcontractors. A company that owns the license provides technical support such as engineering, survey services, mining equipment such as rock blasting equipment, security as well as protective gear; and supervises to know if productivity is being maximized and to

solve some issues that might arise. Miners are paid per kilogram of extracted and weighed mineral ore i.e. they sell their production to the contracting company at a fixed price. The company is by law required to ensure safety and security within the perimeter of its concession.

Some big scale companies that carry out semi mechanized or industrial mining also have their own extraction employees paid on company payroll. These are employees that mine in tunnels that need some specific skills such as tunnels and rail construction and electrification, cart driving as well as requiring high level security than open shaft in which subcontractors operate.

Producing companies carry out onsite rudimentary treatment of the mineral ore such as residue separation and washing using water. Once minerals are extracted and treated onsite, they are packed in special containers and tagged by the agents in charge of traceability before being transported to the Capital for further processing for export.

The production side is supported by transporters and exporters of minerals. This category of the mining sector actors also includes different traders and middlemen. When the mining company is small or artisanal, there are usually middlemen that buy minerals from the mining sites and sell them to the exporting companies. Mineral traders are required by law (Republic of Rwanda, 2012a, art. 11) to have proper licenses issued by the Ministry in charge of commerce and to operate in only designated cities (Republic of Rwanda, 2011, art.7). Domestic transporters that help to shift mineral production from mining sites to export's place are also required to also have proper documentation and ensure that minerals are traceable at any stage of transport (Republic of Rwanda, 2012a, art. 4). Domestic

transporters are either hired by the mining company or the trading company depending on where the sale takes place.

Once minerals arrive the exporting company, they are processed to meet the international standards of quality of ore, normally between 65% and 70% of mineral content before they are packed and given new tags and exported. It is worth noting that some sizeable companies double as mining, domestic transporting and export companies or most of exporting companies have shares in some mining companies. At the time of export, all tags that have been issued from the mining site accompany the mineral ore up to the smelter.

This private operator's branch share the common incentive of maximizing profits. Mining sector requires heavy investment and it is not easy to recoup this investment in short term. Thus, mining companies and minerals exporting companies were motivated by trading in Congo minerals as they neither require investment and respect of environmental regulations as well as labor laws. This search of profit motivated almost all mining companies to indulge in Congo minerals until Dodd-Frank illegalized this trade. The motivation of mining companies is opposite to the incentive of policy makers that want to see Rwandan mining prospering.

5.2.2.2 MINING SECTOR REGULATION AND LICENSING

This set of stakeholders in mining sector is mainly composed of public institutions that deal with policy making, regulation and support of the mining sector. They are composed of the ministry in charge of natural resources and different public agencies that support, regulate or supervise the mining sector. These are the Rwanda Mining, Gas and Petroleum Board that replaced in February 2017 the Geology and Mines Department of the Rwanda Natural

Resources Authority which is the main government institution that oversees mining activities in the country, the Rwanda Revenue Authority that collects taxes and royalties and compiles some export data related to mining sector, and Rwanda Environment Management Authority that has power in all matters related to environment protection. This group also includes local governments that serve as the interface between mining companies and the community but also plays policing roles such as temporary suspending specific activities of companies in their territorial jurisdiction in case of grave breach of standing laws and regulations pending the decision of the relevant authorities in change of suspending or canceling licenses. Local governments also mediates in solving labor issues and other complaints by the population that are not necessarily taken to courts. Local governments also enforce decisions taken by regulatory bodies such as the environmental authority, revenue authority or the board in charge of mining against the mining company.

Since 2006, the government position on mining is clear as it embarked or mining sector reforms[32]. There are three main and interrelated reasons that compelled Rwanda to launch these reforms. Firstly, it was the final and concluding phase of the privatization and liberalization process of the mining sector that was requested by Rwanda's development partners including the World Bank, IMF and the European Union (Perks, 2013). The need to streamline Rwandan mining sector became urgent with the allegations of Rwanda trading in illicit mined Congo minerals when Rwanda development partners were asking it to

[32] In 2006, Rwanda wound up the privatization of the mining sector (Perks, 2016) and initiated different reforms for the liberalization of the sector and the implementation of the ICGLR protocol on the prohibition of illegal exploitation of natural resources. Different transparency measures undertaken in this period are discussed in chapter 6.

disassociate itself with these allegations (R. Cook et al., 2014). Secondly, after the withdrawal from Congo and the continued allegations of neighboring countries illegally exploiting Congo natural resources, the international community supported the creation of the international conference of the Great Lakes region with the aim of providing a platform for dialogue among former warring parties. Among other protocols composing the ICGLR Pact of Peace and Stability is a protocol on the prohibition of illegal exploitation of natural resources in the region (Bøås, Lotsberg, & Ndizeye, 2009). Rwanda was among the first countries to ratify the pact (Kimenyi, 2007). The third reason for Rwanda to reform the mining sector is related to sustainability as trade in Congo war was expected to short live due to security issues involved (Perks, 2013). For these reasons, Rwanda embarked on reforms aiming at building its domestic mining sector, streamline its minerals trade by certifying minerals originating in Rwanda and only trade in foreign minerals whose origin is certified as clean. This is the overarching flagship policy objective and it did not change since then (Nishiuchi & Perks, 2014). However, the implementation of this policy was derailed by inability of public officials to enforce terms of mining licenses to companies that were trading in Congo minerals (Perks, 2013). This was partly because no legal provision proscribed this trade and partly that some politically connected people were involved in this business (UNGoE, 2011). This made officials in charge to close eyes on this trade instead encouraged adding value to mineral ore imported from DRC before re-export (Teeffelen, 2012). This silently destroyed local mining industry.

It is with Dodd-Frank adoption that government officials were empowered to seriously enforce business plans agreed on with mining companies during license applications

(UNGoE, 2015a). This was possible because they were given power to suspend and/or terminate mining licenses for non-compliant companies (Financial Services sub-committee, 2015; UNGoE, 2015a), cross border mineral trade was made illegal, the police started patrolling and impounding imported minerals (Republic of Rwanda, 2011). It was also possible because international organizations provided system to distinguish local minerals from imported ones as well as reports on companies that acted against laws (MINIRENA, 2016).

5.2.2.3 INTERNATIONAL CERTIFYING AND SUPPORT BRANCH

International institutions that ensure transparency of minerals in Rwanda include foreign states institutions such as the USAID and other different US institutions that regulate the conflict minerals as well as the German Federal Institute of Geoscience (BGR) that supports small scale miners to build their capacity and the government institutions to build robust systems to ease mining sector administration and management. This group also includes supranational organizations such as the International Conference of the Great Lakes Region (ICGLR) that issues certificates of origin of minerals for easy traceability and OECD that supports ICGLR in the issuance of regional certificates of traceability. The group also includes that independent/private institutions and NGOS involved in traceability of conflict minerals such as the International Tin Research Institute (ITRI) that supplies mining companies with traceable tags and collects all information related to mining sites and their production in Rwanda, and PACT, an American NGO that supervises the traceability system created by ITRI in African Great Lakes region.

The interests of these international organizations vary following their mission. BGR is a Germany government agency. Its operations in Rwanda fit within ODA that Germany government gives to countries of the great lakes region in support to the ICGLR to eradicate illegal exploitation of minerals and to individual countries to streamline their mining sector. ICGLR as a regional initiative to drive peace and stability is interested in sealing off any source of conflict. ITRI and PACT on the other hand are making profit out of their operations of certifying Rwandan minerals. ITRI is also motivated by making its iTSCi system successful in order to be able to implement it in other countries where minerals are linked to conflicts and violence.

All in all, the interests of government institutions and those of international agencies merge as they all get satisfied when the Rwandan mining sector is resilient and strong. Dodd-Frank helped to make private operators change their incentive and align to the government policy and this resulted into growth of the sector.

5.2.3 Characteristics of Rwandan Mining sector

When measured by investment and using international standards, Rwandan mining operations are classified as small scale mining. According to 2014 World Bank report, no mining company in Rwanda qualifies to be considered either medium sized i.e. with cumulative investment of about US$250 million to US$750 million or large sized i.e. with cumulative investment of more than US$750 million. Besides, Rwandan mining operations are not at the higher end of small scale i.e. with investment of about US$100 million to US$200 million (Nishiuchi & Perks, 2014).

Rwanda's mining operations are small and scattered across the country. According to GMD officials, more than 780 licenses had been issued by the end of 2015 to around 416 mining companies and cooperatives. This confirmed by PACT, the contracted implementer of ITRI supply chain initiate (iTSCi) that counted 815 mining sites in Rwanda (Pact, 2015). This means that some mining operators have more than one concessions. Most of the concessions are less than 5 hectares and produce less than one ton of ore per month whereas some concessions cover many square kilometers (Nishiuchi & Perks, 2014). There are also a number of minerals exporting companies but most of them double as mining companies that also buy mineral ore from small scale miners for export.

Rwanda's minerals are exported raw to smelters in foreign countries especially in Malaysia. The Malaysia Smelting Corporation buys almost all the Rwandan tin produce (Jeroen Cuvelier, Bockstael, Vlassenroot, & Iguma, 2014). As Rwandan economy is less diversified, it has a significant dependency on mining sector as it constitute on average 30% of Rwanda export revenues and employs a sizable number of people. Minerals mined in Rwanda can only be smelted in few countries thus leading to the concentration of clients. These two factors combined with the lack of marketing of Rwandan mining constitute the vulnerability of Rwandan economy to the mining sector.

5.3 Immediate effects of Section 1502 of Dodd-Frank Act on Rwanda

When Dodd-Frank was signed into law by President Barak Obama in August 2010, the 3TG mining sector was shaken. Immediately SEC hired different consultants to evaluate its impact on the business sector in the US. The reports that came out were diverse but some of them highlighted the effects along the supply chain. According to Tulane Law School

study, the effects were to hit smaller supplying companies than the giant hi-tech companies that use 3TG components in last resort. However, the mining and exporting companies in producing states were not part of the 800,000 companies covered by the study. When one follows the argumentation of Tulane Law School study, the smaller the business, the more it is financially affected because these small companies do not have robust information system to help then track or certify the origin of conflict minerals without additional costs. This is also true for the small mining and minerals exporting companies in Rwanda.

Faced with obligation to carry out due diligence in the entire chain of custody of minerals, the U.S. stock market registered companies shifted the burden of coming clean to their suppliers and smelters who, most of them chose to back off from the region to escape going through this process and cut down expected expenses related to reporting. Some few others especially the reliable clients of regional minerals put pressure on producing countries to start the transparence process thus shifted the burden of due diligence to the producers and this is logic because most of these minerals can be sources elsewhere outside the conflict minerals region (Financial Services sub-committee, 2015; Jameson et al., 2015; Seay, 2012).

Regarding effects on Rwanda, it had been informed of the process to adopt into law the conflict minerals bill. Immediately after its adoption, Rwanda did all its possible to mitigate effects of the Dodd-Frank Act. However, some effects materialized and are still going on (Financial Services sub-committee, 2015). These effects hit private investors in mining and their employees as well as Rwandan economy in general. These effects range from political, economic and social.

5.3.1 Political effects

Political effects fell on the government and the state in general. Post-genocide Rwanda is a country that cares about its image. This can be witnessed in its diplomatic dealings. One of the key roles of Rwandan diplomatic missions in foreign countries is to promote Rwandan image (MINAFFET, 2015)[33]. Consequently, the inclusion of Rwanda in the scope of Section 1502 of the Dodd-Frank Act kind of confirmed the accusation against Rwanda as a country illicitly trading in conflict minerals. This law came after 10 years of continuous accusations about direct or indirect pillaging of Congo natural resources. It is indeed such accusations of supporting armed groups in Eastern Congo that led some bilateral development partners to suspend their aid in 2012 after accusations that Rwanda supported M23, a rebel movement in eastern Congo that was among others accused of plundering natural resources (UNGoE, 2012 see also MINAFFET, 2012)

After Dodd-Frank was passed as a law, Rwandan diplomats in the US as well as other officials in charge of mining sector spent most of their time trying to salvage Rwandan image as well as finding an appropriate response to apply to this new situation (Interview of

[33] According to Rwanda's Foreign Diplomacy and Cooperation policy available at www.minaffet.gov.rw, Rwanda's diplomacy aims at promoting Rwanda's image abroad by promoting Rwanda as a country:

- that is peaceful, secure and stable;
- that fights corruption and promotes integrity;
- that respects human rights;
- with law and order;
- with a transparent, administration and judicial process;
- with a stable and predictable macroeconomic policies;
- that respects and honors its international commitments and obligations;
- that contributes to peace and security in her region;
- that is welcoming and is a tourist destination; and attracts national and international investments.

25/2/2016 with Hon. Imena Evode Rwanda Minister in charge of mining)[34]. In this regards, Rwandan ministers as well as diplomats met at different occasions with members of the US congress in charge of overseeing the implementation of the conflict minerals provision to ensure that the position of Rwanda is heard and taken into consideration (Quaadman, 2017). Rwanda managed to convince some countries and people that it has got its own minerals but many others until today consider that Rwandan minerals exports include eastern DRC minerals regardless of different transparency systems and traceability processes that have been put in place (this is the case of Derouen, 2014; UNGoE, 2012).

5.3.2 Economic effects

Conflict minerals economic effects intervened at macro and micro levels. Rwanda as a state lost some income and spent some money to support the shaken mining sector and individual companies and workers also lost some revenue due to unplanned expenses occasioned by compliance with the requirement of the conflict minerals provision.

As discussed in preceding sections, some client companies' first reaction to section 1502 of the Dodd-Frank Act was to boycott sourcing their minerals from the region labeled "conflict zone". As Rwanda had reliable buyers of its minerals, it was advised to clean up its minerals or face a boycott starting with April 1st 2011 but not its designated minerals continued to be sold on international market unlike eastern DRC where the government decreed a total ban on mining and caused mass unemployment in artisanal miners (N. Cook,

[34] Rwandan officials led by Minister of State in charge of Mining, Mr. Imena Evode, went to Washington, DC every year to discuss with US officials on easing Dodd-Frank. Equally, discussions on Dodd-Frank dominated the discussions of private sector with the U.S. Secretary of Commerce Penny Pritzker during her visit in Rwanda in January 2016.

2012; Electronic Industry Citizenship Coalition (EICC)/Global e-Sustainability Initiative (GeSI), 2012). . In the meantime, mining continued as Rwanda rushed to certify its minerals. In terms of volume, the main mineral exported by Rwanda is tin, and the bulk of it is bought by Malaysia Smelting Corporation which had already subscribed to Conflict Free Smelter Initiative and is one of the suppliers to the component manufactures in conflict minerals provision chain of custody according to the conflict minerals provision.

However, as time elapsed, certification did not prevent the tungsten clients to boycott Rwandan tungsten starting from 2013 and this boycott was extended to the Great Lakes Region in 2014. Until 2015, Rwanda had difficulties to sell its tungsten. This boycott was so serious that some European companies that have shares in some tungsten mining companies in Rwanda suspended sourcing from their own mines (Interview of 25 February 2016 with Malick Kalima)[35]. ,

The certification process occasioned additional financial costs. In addition to taxes and loyalties paid by mining and exporting companies, additional 6% of the exported value is spent on certification process and paid to foreign companies involved in this process. This cost is borne by mining companies and their subcontractors (artisanal miners). In Rwanda, there are two main companies involved in this process, the first is ITRI, the London-based Tin Research Institute that developed the ITRI Supply Chain Initiative (iTSCi) program that provides tags for minerals from the mine to the export point, the tags that accompany minerals up to smelters. The second company involved in this process is PACT, a nonprofit

[35] Malick Kalima is the Owner of Wolfram Mining and Processing and President of Rwanda Mining Association).

international development organization headquartered in the US that oversees the iTSCi traceability process on the field. A small portion of this money is paid to local agents that oversee the tagging and bagging process on behalf of the government. This amount of money paid to these companies is more than the loyalties paid to the government that are fixed at 4% of the export value.

In order to be able to cover these fees, the exporting companies shift them to the mining companies and the latter charge this money to the individual artisans involved in mining. This addition expenses in combination with bad international market prices led to the reduction of the wages of miners from US$7 per kilogram to US$2.5 per kilogram by March 2016.

5.3.3 Social effects

These effects hit individual miners and their families as well as the community surrounding mining sites that saw reduction in the amount of social corporate responsibility by mining companies. Regarding individual miners, the price per mined kilogram of mineral ore reduced. The reduction of miners' take-home wage had effects on their families as they depended on this income to cover daily living, the universal health insurance and school fees for their children. Rwandan mining sector refrained from retrenching employees until 2015 when they started planning retrenching some staff in the administration due to financial difficulties especially in the main companies mining tungsten. In previous years, they used profits accumulated in good seasons to cover losses but since 2015, the reserves dried up and could no longer sustain the status quo (Interview of March 2nd, 2017 with Janvier

Ndabananiye, Director of Production of New Bugarama Mining in charge)[36]. When I was conducting my interviews, both Gifurwe and New Bugarama wolfram concessions were considering retrenching some staff to mitigate losses occasioned by lack of wolfram market. The only hope was that new clients from Japan and Europe had planned to visit Rwandan mining and exporting companies to discuss new market opportunities (Interview of 2 March 2016 with Frank Gatera, Secretary General of Rwanda Mining Association).

To conclude this section, Dodd-Frank Act's section 1502 affected Rwanda's economy and the livelihood of miners. However, as literature and the practice shows, effects alone do not explain the compliance of Rwanda. There is a long list of countries that were seriously affected by economic sanctions[37] even harder than Rwanda but they still refused to comply with the requirement of the sender. Therefore, Rwandan compliance should be explained by other factors other than effects.

5.4 Vulnerability as a factors explaining Rwandan susceptibility to effects of section 1502 of Dodd-Frank

As discussed in chapter 2, the sanction sending country takes into account vulnerability of the target state in calibrating the sanctions to impose. This section reviews the factors that makes Rwanda susceptible to effects of economic sanctions grouped under vulnerability

[36] According to Janvier Ndabananiye, the Director of operations of the new Bugarama Mines owned by Stinghlamber family, the mines were profitable for many years. When Dodd-Frank Act started biting especially when clients decided to stop sourcing tungsten from the region, the company maintained all its staff and covered the expenses with the profits accumulated in previous years with the hope that unfavorable period will end soon. Of course their take-home was slashed by more than a half from US$7 to US$2.5 per kilogram for miners. At the time of the visit, the reserves were drying up and the company was considering to retrench some staff.

[37] Belarus, Burma, Burundi, Central African Republic, Cote d'Ivoire, Cuba, Iran, North Korea, Russia, Somalia, Sudan, Syria, Venezuela, Yemen, Zimbabwe. The list is long as there are some target sanctions that do not have serious effects but are levied for symbolic reasons.

factors. The vulnerability of Rwanda is characterized by three elements namely its dependency on mining, the concentration of its clients in countries implementing the conflict minerals provision and lack of adequate information on Rwandan mining sector in the international community

5.4.1 Rwandan dependency on mining sector

Dependency in this case refers to reliance on a commodity. Though mining constitutes only a third of Rwandan export revenues, its contribution is well understood when the Rwanda's barriers to trade are taken into account. Rwanda is a small economy, small in size and landlocked country. This makes Rwanda less competitive in terms of manufacturing compared to its neighbors such as Kenya, Tanzania and Uganda. Thus, Rwanda relies on export of some primary commodities such as tea, coffee, minerals and pyrethrum. Another source of foreign currency is tourism, the biggest foreign exchange earner and the most promising sector. In addition to geographic disadvantage, Rwanda has a big trade deficit that it has to rely on loan and grants from foreign lenders and donors to cover the gap. Foreign aid comes with political conditionality that is not good for a country's independence. Thus, any local source of foreign currency helps to cover imports and replenish foreign reserves as the outflow of foreign currency without equivalent export earnings puts pressure on Rwandan franc and leads to its devaluation and difficulties in controlling inflation. Whenever mineral revenues diminished, the trade deficit got wider. This in return leads Rwanda to ever depend on loans from international lenders and it creates permanent problems of debt servicing, reduction of foreign reserves and arrears in payment.

The following graphs shows how Rwanda's trade deficit evolves and the contribution of minerals exports in total exports.

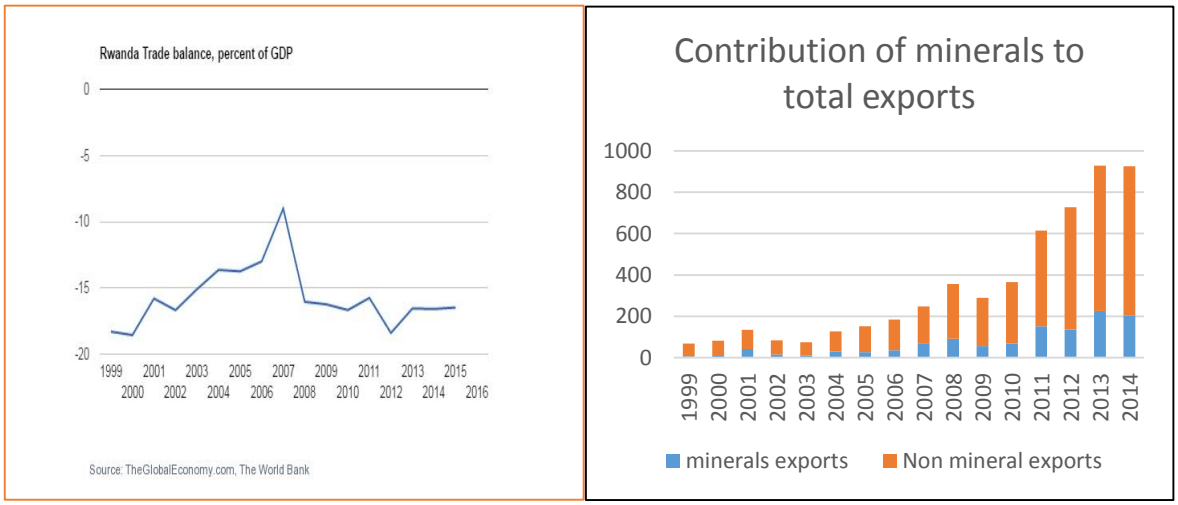

Figure 5: Rwanda trade deficit and the share of minerals in total exports

Source: Compiled from Rwanda's Central Bank

The first figure shows that Rwandan trade deficit keeps growing. It was at around negative 17% in 2015. As the economy grows, the deficit also grows and the balance of payment can only be achieved by increasing exports. As mentioned earlier, opportunities outside primary commodities are still limited. The only relief possible today is to increase productivity in the tradition export sectors namely minerals, coffee and tea and keep growing tourism industry. The second figure shows that the contribution of minerals in total export has not significantly increased since 1999. It oscillates around 30%.

5.4.2 Concentration of international buyers

Rwandan mining sector is important in the sense that together with tea and coffee they constitute the source of foreign currency that Rwanda needs to cover part of its imports

that increase on daily basis. However, Rwanda depends on few buyers of its minerals. As Rwanda so far exports raw materials in their natural forms, its minerals can only be bought by few smelters. A part from rudimentary processing aiming at separating minerals with soil and cutting big mineral stones into small particles for easy transport, there is no any other industrial processing. Worldwide, it is estimated that there are between 400 and 500 smelters of 3T (Assent, 2015; Young, 2015). However, smelters that buy Rwandan minerals are less than 40 and are mainly based in Malaysia and China. In addition, most of these smelters are part of the CFSI (conflict free smelter initiative) created by the major hi-tech companies in the observance of OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas (Jameson et al., 2015; Young, Zhe, & Dias, 2014). This means that most of the smelters that buy Rwandan mineral ore are likely to be selling their products to companies that either are constrained by these OECD guidelines or by the conflict minerals provision of the US government.

The limited number of clients for Rwandan minerals is a problem in the sense that Rwanda has a limited bargaining power as there is limited competition. In addition, Rwanda only relies on its clients as it does not have technology to make good use of these minerals when they have no market.

To solve this problem, Rwanda has recently embarked on the process of resuming its tin smelter to add value to its tin ore, but certification of the smelter by CFSI has been delayed due to different technical problems in the smelter (MINIRENA, 2016). Rwanda is also negotiating with investors to build a tungsten and a tantalum smelter (Nokwali, 2016). Adding value to Rwandan minerals and sell the ingots instead of raw minerals would attract

other types of clients that might take Rwandan mining sector to another level. This should also help the country to overcome difficulties linked to primary commodities on international market.

5.4.3 Lack of marketing

Besides dependence and concentration, Rwandan mining sector has been marked by a low publicity. It is only after the genocide that mining was made a flagship for Rwandan economic development. Before that period, only coffee and tea were taken as the pillar of Rwandan economy. Many people where referring to Rwanda as a country without natural resources. Only Congo was taken as a country full of minerals whereas Rwanda was a poor country without any resources (Polinares, 2012).

Rwandan relies on its traditional clients, those that have been buying Rwandan minerals from the time it was dominated by colonial companies. For this reason, Rwandan minerals are not known outside those small circles of refiners. In order to mitigate bad image given on Rwandan minerals by conflict minerals smuggled from Congo (Sustainable Security Team, 2016), Rwanda mining actors need to put in place an aggressive marketing system in order to make known its minerals. As quantities are still mall, getting two or three additional clients would make a big difference.

5.5. The factors that explain Rwanda's prompt decision to comply

The sanction's theory has identified situations that in addition to vulnerability are likely to be considered in deciding to comply or resist and some of them can be applicable to Rwanda. This section will discuss two factors applicable to Rwanda namely enjoying cordial relationship with the US and the small size of Rwandan economy. In the contrary, democracy

as the political regime has no significant impact in Rwanda's decision making to comply or not with the economic sanctions. After introducing the above two elements, this section discusses the additional element not yet covered by sanctions literature. This study suggest that this new element is critical in backing up the Rwandan decision to comply with the conflict minerals provision.

Regarding friendship between Rwanda and US, the theory suggests that it is easier for the sender to threaten with or levy economic sanctions to its friendly states as the later will likely comply to save the relationship as the benefits are most of the time higher than the cost of compliance. Furthermore, it is easy for both parties to discuss better ways of implementing actions in compliance of the sender's demand as are many channels of dialogue between the sender and the target country (Allen, 2005; Hufbauer & Schott, 2016). In the case of Rwanda, the US government is the main aid provider to Rwanda and has military cooperation with Rwanda. This means that Rwanda as the target enjoys cordial relationship with the US. However, this element alone is not conclusive in making an independent state to bend due to economic sanctions, instead, sanctions tend to change states from friendly to hostile as the Zimbabwe case portrays (Portela, 2014; Sims, Masamvu, & Mirell, 2010).

As for the size of Rwandan economy, literature established that the sender will easily levy economic sanctions to a country when the latter is a small economic power. Small economies are seriously hit by economic effects of sanctions more than big economies that are diversified and can easily adjust to the new situation. In the particular case of Rwanda, it satisfies the criteria but once again, the theory has proved that small economies such as Cuba, Iran, North Korea, Sudan, Zimbabwe, and others have devised means to resist sanctions such

as building alliance with other states and find alternative markets for its products. This means that Rwanda could also have taken the same route. Thus, it is relevant to find out why it immediately complied with the sanctions.

The new element this study suggests and has played an important role in convincing Rwanda to comply with the demand of the US to change its policy and political behavior in relations to trading minerals from neighboring DRC is that Rwanda has already started the reform process of curbing uncertified minerals from DRC that were doing harm to clean minerals from Rwanda but some interests hindered the implementation of this reform. When the US sanctioned DRC neighboring countries for trading DRC minerals, it was easy for Rwanda to decide to comply with the new requirement by fast-tracking its existing policy reforms by focusing on implementation of actions that streamline its minerals trade by excluding all minerals without proper documents certifying their origin.

The mining sector reforms had been undertaken as part of RPF agenda to modernize Rwandan mining sector years before the conflict minerals provision was adopted. Emphasis is put on RPF as it is considered as the engine of Rwandan government and any decision taken has an RPF mark as it has to be approved in party ranks before reaching the government echelons. This gives RPF a leeway to weigh into decision making process. Moreover, RPF as the ruling party has sizeable representation in parliament, in cabinet and in public service as it is allowed for Rwandan public service to be members of political

parties[38]. The ins and outs of policy actions undertaken as quick wins to reform Rwandan mining policy are discussed in in the subsequent chapter.

5.6 Conclusion

To sum up, this chapter shows that Rwanda indeed has minerals and its mining sector can be traced back in 1900s in early days of Rwandan contact with the West. In more than 100 years, Rwandan mining has gone through different phases and each phase has its hardships. However, the period that started in 1985 to 2005 can be described as the black hole period of mining sector in Rwanda due to difficulties to trace data from these 20 years. In the last 100 years Rwandan mining had focused on tin, tantalum and tungsten ores (3Ts). These 3Ts happened to be the targets of the conflict minerals provision created by Section 1502 of the Dodd-Frank Act. Mining sector being a significant contributor in Rwanda's export earnings, anything that affects extraction and trade of 3Ts affects the entire mining sector in Rwanda, thus a big blow to Rwandan economy. Rwandan mining sector was affected by the conflict minerals provision because it has some traits that make it susceptible to any external shock such as dependency to 3Ts and concentration of clients. In order to keep afloat mining sector, different actors in Rwanda led by the government took different measures to cushion mining sector from effects of the conflict minerals provision. Rwanda did this by yielding to the requirement of section 1502 of Dodd-Frank.

This chapter has discussed the structure of the mining sector, and suggested that different actors have different incentives. Whereas the private operators are motivated by

[38] Only security forces (army, police, and prison) and judges are proscribed to be members of political parties.

profits, government institutions are motivated by building a strong mining sector that supports economic growth. These incentives crushed in the period that preceded Dodd-Frank and the interests of private operators prevailed because they had support of some politicians or politically connected people. It was easier for a company to establish a buying counter in a city at the border with Congo and collect cheap minerals that investing in Rwandan mining concession where initial costs are high and labor and environment regulations incur additional costs.

These diverging interests merged with the pressure of Dodd-Frank's section 1502 that threatened to shut down the mining sector. Dodd-Frank Act requirements and effects empowered government officials to take control again and led the implementation of policy actions to mitigate effects of Dodd-Frank. Government and private operators were aided by international organizations that either had business interests or are bilateral partners.

This chapter introduced Rwandan vulnerability as one factor that exacerbated effects of section 1502 on Rwanda but emphasized that vulnerability alone cannot explain Rwanda's compliance as literature shows that in similar cases countries have resisted to change their policy and attitude. The factor that weighed in to convince Rwanda to comply is the existence of the policy reforms that were in line with the conflict minerals provision requirement. It was easy for Rwanda to comply with the requirement with relatively affordable cost and without changing causing political resistance.

The next chapter provides details of different policy measures undertaken in this regard by Rwanda and their effectiveness not only to mitigate effects of the conflict minerals provision but also to turn mining into a resilient sector that drives economic growth.

CHAPTER 6: ELEMENTS THAT EXPLAIN RWANDAN COMPLIANCE TO THE CONFLICT MINERALS

The purpose of this chapter is to analyze in details the reforms that Rwanda carried out before the incoming of the conflict minerals and how they helped to transition Rwanda in hard period that followed the adoption of section 1502 of Dodd-Frank. New policy measures taken after Dodd-Frank were adopted built on the existing ones and improved them for more resilience and sustainability of the mining sector. This chapter also underlines changes that happened after the incoming of Dodd-Frank.

Due to the international outcry against the use of natural resources especially minerals in eastern DRC to finance war and the finger-pointing about the role of Rwanda-based companies in trade of these minerals, after the regional countries grouped in the International Conference of the Great Lakes Region (ICGLR) agreed to curb the illicit exploitation and trade of natural resources that finance armed conflicts, Rwanda started the journey of certifying its minerals to put an end to these accusations. It is worth reminding that at this period, Rwanda had completed the privatization and liberalization of the mining sector. The measures taken in the certification process of the origin of minerals exported by Rwanda can be classified in pre-Dodd-Frank mining sector reforms and certification measures and those measures adopted after Dodd-Frank Act adoption.

Besides, these measures can be subdivided into international transparency systems that Rwanda subscribed to and national initiatives that include administrative and legal measures. This chapter looks at these different measures taken to mitigate effects of section

1502 of Dodd-Frank Act and to reinforce Rwandan mining sector. For the reforms to take place and be sustainable, there have to be some committed actors that drive these reforms.

Thus, this chapter will also briefly introduce the key actors behind reforms and other important decisions in streamlining mining sector especially after Dodd-Frank Act. It also attempts to assess their effectiveness in in achieving these two objectives.

6.1 Comparison of situation before and during Dodd-Frank

The coming of Dodd-Frank Act had two major changes on Rwanda. Primo, the government attitude changed from denial of taking part in illicit trade of Congo minerals to active fight against conflict minerals. The second change is related to the attitude of private mining operators who abandoned cross-border trade and smuggling DRC minerals to investing in Rwandan mining sites. The table below shows some details of comparison between two periods.

Table 4: Changes that happened after Dodd-Frank Act adoption

	Before Dodd-Frank (2006-2010)	**Dodd-Frank era (2011-Present**
Government	- Denial of any role - Laws facilitates laundering DRC minerals[39] - No systematic data collection of mineral imports at borders - Argues that there is free trade	- Put in place anti-smuggling mechanisms - Reviewed laws and regulation to tighten transparency and certification - Data collection at borders and at mining sites became mandatory and systematic - Reformed licensing and size of concessions

[39] Rwanda law of the time stipulated that when there is value addition of at least 30%, minerals are considered as Rwandan origin

	- no systematic anti-smuggling efforts - Reforms were not systematically implemented	- International organizations were called in to oversee what is taking place
Private	- Buying DRC minerals without caring about their origin - Launder DRC minerals by processing them - overlooked their concessions in Rwanda for which they got licenses - No investment in their concessions	- Stopped the cross border mineral trade - Embraced the tagging and bagging scheme to certify the origin of their minerals - Re-focused on their concessions and increased investment to overhaul productivity

Source: own compilation.

Details of policy actions that lead to the change in illustrated in the table above will be discussed in the sections below.

6.2 Pre-Dodd-Frank mining sector reforms and mineral traceability attempts

Reforms in the Rwandan mining sector had been wished for since the collapse of SOMIRWA in 1987 but were frustrated by the civil war that broke out in October 1990[40]. The then government did not fast-track reforms agreed upon with its stakeholders in the

[40] On October 1st, 1990, a war broke out between Rwanda Patriotic Army (RPA) composed of Rwandan Tutsi refugees from neighboring countries (a rebel movement) and the Rwandan armed forces, the regular army. The reason behind this war was the failure by the Rwandan government to repatriate Rwandan refugees for more than 30 years. The war started in the Northern part of Rwanda bordering Uganda but soon after insecurity spread across the entire Rwandan territory. The war lasted for four years and ended with the victory of the Rwandan Patriotic Army over the regular armed forces after the collapse of the Arusha Peace Accord and the genocide against Tutsi that befell Rwanda in 1994.

framework of the structural adjustment programs namely the World Bank, the International Monetary Fund and the Commission of European Economic Community (Perks, 2016) for the fear of losing control over minerals revenues needed to wage the war against RPA rebellion. Among the reforms envisaged by then government were the liberalization of the mining concession whereby the government was to privatized all its mining concessions and restrict its role on awarding mining licenses, regulation and monitoring of mining operations, collecting taxes and loyalties from mining companies, mining revenue redistribution and management as well as the implementation of sustainable development policies and projects in the sector (Alba, 2009).

After the change of regime in Rwanda, these reforms were resumed with the launch of privatization process of mining concessions along with other sectors eligible for privatization in 1996. The privatization of mining sector was concluded in 2006 but this coincided with a negative campaign against Rwandan minerals on allegation that Rwanda was trading in Congo minerals (Spittaels & Hilgert, 2008). Rwanda had withdrawn its troops from eastern DRC in 2003 but accusations went on that Rwanda was supporting some armed groups fighting against DRC government for the purpose of perpetuating the lucrative minerals trade (Stearns, 2012). To come clean about its minerals, Rwanda embarked on certification of its minerals.

6.2.1 Introduction of the Analytical Fingerprint (AFP) for Rwandan minerals

In November 2006, eleven Central African countries signed among other protocols that are annexed to the Pact of the International Conference of the Great Lakes Region the Protocol against the Illegal Exploitation of Natural Resources. This protocol provides in its

article 11 that countries are requested to put in place mineral certification mechanisms (ICGLR, 2012). The process of certification of Rwandan minerals can be traced back from her signature of the Pact on Security, Stability and Development in the Great Lakes Region on 15/2/2006. By signing this pact, Rwanda also accepted to be bound by its protocol on illegal exploitation of natural resources. Rwanda reaffirmed its commitment to be bound by the regional certification mechanism in her ratification of the Pact 15/11/2007. The ICGLR certification for the exploitation, monitoring and verification of natural resources within the great lakes region mechanism was envisaged in the framework of the Protocol against Illegal Exploitation of Natural Resources as enshrined in article 9 of the above mentioned Pact (ICGLR, 2011).

It is in this framework and in order to curb accusations of trading in and serving as route of DRC minerals, Rwanda initiated the project to collect an analytical fingerprint (AFP) of deposits containing 3T minerals. AFP is a technology developed by BGR[41] and was introduced in Rwanda to help trace minerals along the chain of custody by capturing "geochemical, geo-chronological, and mineralogical signatures of specific ore production sites"(BGR, 2011, p. 1) to be able to differentiate minerals from different locations in the Great lakes Region (Harmon et al., 2011). According to Levin et al (2013), AFP is a forensic technology that verifies "the origin of minerals without relying on any artificially added traceability information such as tagging"(Levin, Cook, Jorns, & Roesen, 2013, p. 34). This

[41] BGR-Bundesanstalt für Geowissenschaften und Rohstoffe, the German Federal Institute for Geosciences and Natural Resources is the leading organization supporting certification of mineral resources from the Great Lakes region since 2006. BGR not only created tools used in minerals certification but also support regional initiatives within IGCLR and support small mining associations to streamline their activities for enhanced transparence.

means that AFP is a laboratory based analysis of identifying the origin of a mineral concentrate and achieves its goal by comparing the features of the mineral with samples already stored in the database (BGR & OGMR, 2011). AFP was initially designed for tantalum and was later expanded to tin and tungsten ore concentrates. It revealed not to be effective due to lack of incentive to impose it to multiple actors besides being very complex and onerous (Hofmann, Schleper, & Blome, 2015).

6.2.2 Introduction of Certified Trading Chains

To implement its obligations stemming from the ICGLR protocol, in 2008, after the inability of AFP to deliver the desired result, Rwanda initiated the Certified Trading Chains (CTC) system in collaboration with BGR (Long et al., 2012). CTC was developed by BGR building on AFP results analysis (Usanov et al., 2013). CTC was implemented for the first time in Rwanda as a pilot project in six mines and was based on OECD guidelines on responsible sourcing of minerals as applicable to artisanal and small scale mining that were being discussed among different stakeholders involved in mining industry in the region and OECD Secretariat (Long et al., 2012). At this stage, CTC was implemented as a voluntary traceability system between 2008 and 2010 and was scaled up to all Rwandan mining deposits immediately after the adoption of the Dodd-Frank Act by the US Congress. (R. Cook et al., 2014).

CTC in Rwanda was built on 5 principles and 20 standards in order to comply with the requirement of OECD guidelines. In addition to its main objective of streamlining the minerals supply chain by taking out conflict minerals, increasing traceability and certification of minerals, CTC catered for other mining industry best practices and standards related to

labor and working conditions; security; community development; and environmental protection (N. Cook, 2012).

Table 5: CTC 5 principles and their dependent standards

What CTC Principles seek to safeguard and improve	**Companies under CTC system are benchmarked against the following standards**
Ensure minerals transparency and traceability as well as compliance with law and international standards	✓ Certification of mineral origin and volumes ✓ Tax compliance ✓ Publishing all payments made to government as per Extractive Industry Transparence Initiative-EITI standards ✓ Opposing bribery and fraudulent payments
Improve working conditions of employees and contracted staff	✓ Ensuring salaries and price are not lesser than those payable in comparable companies Rwanda ✓ Not employing child under 16 years ✓ Supporting workers organizations and collective bargain ✓ Providing personal protective equipment to workers ✓ Ensuring safety and occupation health ✓ Training contractors on occupation health and pother safety measures

Ensure security and human rights on mining sites	✓ Training enough security forces ✓ Conducting regular risk assessment
Company consults communities where it operates and contributes to their socio-economic welfare	✓ Regular communication with the neighbor and local government and solving grievances of common interests ✓ Supporting local companies to supply company operations carry out some developmental project and infrastructure that benefit the general population ✓ Obtaining free, prior and informed consent of the population before acquiring the property ✓ Taking into account gender sensitive aspects in their operations
Ensure adequate environmental protection	✓ Carrying out the environmental impact assessment for a better environmental protection and management strategy ✓ Properly treating waste and dispose-off hazards materials from the mines ✓ Full rehabilitation of degraded environment

Source: Drawn from information from BGR flyer on CTC implementation

CTC involved governments of the producing countries and that of client companies, the international partners that range from governments, government agencies, independent public and private institutions, private companies, auditors as well as companies involved in

mining and minerals export and processing. These different actors met in different fora to assess the robustness of the system in ensuring transparence in the minerals supply chain custody. The trade chain was formed between the producer who is regulated and advised by his government and assisted by consulting experts in some technical aspects, and the client (who benefited from the support of his government) by the sale of minerals. Auditors came in the middle to evaluate performance of the producers and the traceability of minerals using different tools including reports. There was national coordination unity that encompassed actors from different levels and its role was to oversee activities of auditors and was in constant discussions with the government of the producer as well as with the client. The coordination unit was supported by the international partners. The government of the producer was required to supervise producer's activity to enhance compliance with CTC principles and standards (BGR, 2011).

These initiatives to certify the origin of Rwandan minerals were not satisfactory to clear the name of Rwandan minerals[42]. The main reasons were that these certification systems were not only voluntary but were also implemented as a trial at only six main mining concessions, which were not enough to convince the international observers that CTC was barring conflict minerals from Rwandan market. Another reason was that there was some resistance from minerals exporting company to extend traceability system on all mine sites

[42] During the campaign that resulted in the Dodd-Frank Act's Section 1502, different documents were published by NGOs and activists that led the campaign and all of them were accusing Rwanda of abetting the illicit trade of DRC minerals or of serving as trade route (see for example Enough Project & Global Witness, 2009; Prendergast, 2009). These accusations were also reiterated in different reports of the UN group of experts on Congo (UNGoE, 2006, 2007, 2009).

as it would kill their business of trading minerals from across the border[43]. Besides, CTC did not have an in-built control mechanisms i.e. it relied on the good will of the subscribing companies while AFP needed a robust laboratory to analyze samples, which was not ready by then. The failure to roll out these systems to the whole country to curb smuggling and trace minerals traded across the border with eastern DRC can explain why the US Congress included Rwandan minerals in the scope of the section 1502 (Email exchange of 25 December 2015 with Toby Whitney). It was with anticipated and actual effects of the Dodd-Frank Act and the panic it caused among mining operators and mineral exporting companies that all mining sector actors agreed that tracing the origin of Rwandan minerals was the best option to adopt.

6.3 Dodd-Frank era policies measures to enhance transparency in Rwanda mining sector

The adoption of Section 1502 of Dodd-Frank Act changed the discourse in Rwanda in regards to minerals cross border trade from denial of fraudulent Congo minerals into Rwanda to implementing traceability of its minerals for effective transparency (Global Witness, 2011). On 11 March 2011, Rwanda issued regulation related to traceability in anticipation for the deadline of April 1st, 2011 set by concerned clients on African producing countries to have devised transparency mechanisms to allow buying companies to prepare for the SEC reporting. According to this new traceability regulation, every minerals shipment

[43] The difference in official figures of local production and export and failure to indicate the origin of the difference (Garrett & Mitchell, 2009) may indicate that exporters were not willing to disclose information related to their mineral trade business.

is required to have proper documents certified by the competent authorities and bear a tag provided by the competent authority (MINIRENA, 2016).

When traceability process was implemented between 2006 and 2010, it was not restrictive but voluntary, therefore, it could not manage to dissuade traders who were buying minerals across the border in eastern DRC to stop and invest in their concessions in Rwanda as it was against their interests. Thus, the adoption of the conflict minerals provision increased pressure to the government of Rwanda to tighten the supervision of its mining sector and to all private operators involved in mining to adopt a certain attitude towards Dodd-Frank Act requirements to save Rwandan mining sector from collapsing.

Though the process of complying with the requirement of Dodd-Frank Act generated extra financial charges to mining companies and was indeed expensive to small scale miners, Dodd-Frank presented a good opportunity for the government to put an end to the mineral cross-border trade that was complicating the fight against minerals smuggling. Indeed, Rwandan companies' focus on mineral trade business dominated by DRC imported minerals delayed the growth of Rwandan mining sector and the achievement of sector targets set during the privatization of government mining concessions and liberalization of mining industry.

The efforts deployed to fight cross border smuggling and obliging traders involved in cross border trade to have proper documentation, and at the same time enforcing business plans presented during mining license application yielded in increased production (Perks, 2016). However, different observers are skeptical of the sharp increase in mineral production immediately after the adoption of Dodd-Frank Act and suspect that some existing stocks

were sold to anticipate the coming into force of SEC guidelines on conflict minerals (Teeffelen, 2012). As there were cases of unreported imports from Congo in 2007, there were still doubts that Rwandan based companies and individuals stopped the cross border business with some Congolese traders (Narine, 2013; Taylor, 2015; UNGoE, 2012c). It is with tough anti-minerals smuggling regulations and their enforcement by the security organs that all the concerned people were made to comply as the incentive for fraud was not worth it as exporters could not take untagged minerals. However, for some companies that had dedicated to extraction in Rwanda, traceability was a solution for them as it helped to reduce theft of their produce. Measures taken by Rwanda after the adoption of Dodd-Frank can be grouped into subscription to international transparency measures and adopting local measures to streamline the mining sector.

6.3.1 International transparency measures

After wide consultations between Great Lakes Region countries supported by the African Union and the European Union amounted in the Pact of Peace and Stability, that among other protocols encompasses the protocol on illegal exploitation of natural resources, OECD and ICGLR's 11 member countries started discussions about best practices that would govern trade of minerals from the region. It is in this regards that some European research institutions and organizations, supported by their government started creating traceability systems that would be used to curtail illegal trade of minerals. Discussions between OECD and ICGLR resulted in 2010 in "the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas ("the Guidance"). In parallel, research institutes and organizations came up with the two main traceability systems

namely the Certified Trading Chain earlier discussed and the iTSCi developed the London based International Tin Research Institute. In addition to these two, the collaboration between OECD and ICGLR also resulted in the Regional Certification Mechanism (RCM). This section will elaborate on the three systems.

6.3.1.1 CTC

As discussed in the previous section, CTC was implemented for the first time as a pilot project few years before Dodd-Frank was adopted and was scaled up to all mines in the aftermath of the adoption of Dodd-Frank Act, to be later abandoned in favor of iTSCi that was more user friendly. According to the BGR & OGMR (2011), CTC had the following objectives:

- Changing mining industry practices by the pressure of a market campaign;
- Bringing the key government actors to understand and support the new certification scheme;
- Improving corporate practice by introducing a stakeholder-based set of standards, and;
- Putting in place a credible and independent mechanism for certifying mining companies' operations. .

As earlier mentioned, CTC was voluntary and implemented as a pilot in 6 main mine sites namely Gifurwe, Cyubi, Rutongo, Nyakabingo, Gatumba and Nemba. When Dodd-Frank was adopted, CTC was rolled out on all mine sites in Rwanda. It went on until late 2011 when it was terminated and Rwanda continued with iTSCi which immediately after the adoption of Dodd-Frank was used as an implementing tool of CTC (BGR & OGMR, 2011).

CTC had a weakness of lacking enforcement mechanism in in the sense that the mining operator was only encouraged to adhere to CTC 20 standards but there was no uniform way of implementing these standards. Unlike iTSCi that works from upstream to downstream of the chain of custody (Hofmann et al., 2015), CTC relied on a post-hoc verification of adherence to standards (BGR, 2010). This was not enough to persuade companies that were used to trade in lucrative DRC minerals to stop this business. When iTSCi was introduced as CTC component, it was used to check whether mining operators and exporters are adhering to standards set in CTC. Since August 2011, CTC was scaled down and its components were made part of the ICGLR RCM (Resolve, 2012).

6.3.1.2 ITSCI

The ITRI Tin Supply Chain Initiative (iTSCi) is a mineral traceability system developed by the International Tin Research Institute (ITRI), a tin lobby organization based in London. iTSCi was developed in the same framework with CTC in 2008 and tested for the first time in eastern DRC in early 2010 (Teeffelen, 2012). After the adoption of Section 1502 of the Dodd-Frank Act, the system was expended to tantalum and tungsten (Jeroen Cuvelier et al., 2014). iTSCi uses coded tags that are used to seal bags containing mineral ore from a specific mining site. The system also involves yearly bags and tags audit of different participants. iTSCi issues two different tags one at the extraction point and another at the processing point. These tags are added to the bag of mineral ore and each one has its unique barcode number (Koning, 2011). At every stage, tag data is entered in the iTSCi logbook for easy tracking (Levin et al., 2013). The information included in the logbook include "mine of origin, quantity, dates and method of extraction; locations where minerals are consolidated,

traded, processed and upgraded; and the identification of all intermediaries, consolidators or other actors in the upstream supply" (R. Cook et al., 2014, p.50). Data collected from various actors are stored in databases that help in comparing origin of different mineral ores (N. Cook, 2012).

Two months after Dodd-Frank was adopted, the Rwandan Office of Geology and Mines (OGMR) entered an agreement with ITRI in September 2010 to implement iTSCi in Rwanda. iTSCi was launched in Rwanda in December 2010, and by February 2011, it was implemented in 5 concessions owned by three main mining companies. At that time, it was not yet clear if iTSCi was going to replace CTC or if it is going to be its implementing tool. Regarding this issue, OGMR agreed with the BGR that iTSCi satisfied the traceability standards of CTC, thus it could be used within CTC framework (BGR & OGMR, 2011). By the end of 2012, iTSCi was implemented in 400 mine sites and in May 2013, it was made mandatory to all active mine sites in Rwanda that amounted to 480 sites employing 96 tagging agents. By the end of 2015, there were more than 815 mines whose 442 were active mining sites all of them implementing iTSCi (Jeroen Cuvelier et al., 2014; Pact, 2015).

There was rapid implementation in Rwanda because ITRI wanted to showcase it as a success. Moreover, after Dodd-Frank was adopted, president Kabila of DRC banned mining activities in eastern Congo and this put a halt at all mining operations and the pilot test of iTSCi, thus ITRI moved its program to Rwanda (Pact, 2015). The small size of Rwanda as well as security helped iTSCi developers to concentrate and focus on Rwanda and this gave satisfactory results whereas the eastern DRC is vast and insecure, where the government does

not control some areas, thus difficult to implement adequately the traceability system (Usanov et al., 2013).

The problem iTSCi shares with other regional traceability systems is its inability to trace gold. Difficulties to trace gold are caused by its high value and low weight that enable smugglers to transport it easily without asking the assistance of a third country institutions (Mthembu-Salter & Consulting, 2015). Moreover, gold being fungible, it can be used as a means of exchange in lieu and place of money and this facilitates the operations of rebel movements that might exchange gold with weapons and ammunitions (Bafilemba & Lezhnev, 2015; Pact, 2015). Another weakness identified for iTSCi is its lack of public accountability. In this system, business is done among mining actors not outsiders. In this regards, iTSCi officers are reluctant to share detailed non-aggregated information with persons outside the chain in order not to compromise the business of its members and to protect business confidentiality (Jeroen Cuvelier et al., 2014). The third weakness of this system is that the tag determines everything and once the tag falls in the hand of a smuggler, his/her mineral ore becomes clean. In this regards, some iTSCi members in Rwanda had been accused of selling tags to Congo minerals smugglers or used them to launder smuggled minerals from the DRC (Financial Services sub-committee, 2015; UNGoE, 2015b, 2015a).

In order to remedy to the identified weaknesses of iTSCi, ITRI introduced the third party audit that is carried out in Rwanda by Chanel Research Company (Levin et al., 2013; MINIRENA, 2013b). This company audits all iTSCi member companies based on international standards such as OECD guidelines, the SEC guidelines and iTSCi chain of

custody procedure requirements (Resolve, 2012). The opportunity and the frequency of audit are determined by the level of considered risk in each case (Levin et al., 2013).

Rwandan government to complement the efforts of tagging and bagging traceability carried out in the framework of iTSCi, subscribed to the Regional Certification Mechanism spearheaded by ICGLR, a supranational organization, that has a component of third party audit and issues certificates of origin of exported minerals.

6.3.1.3 ICGLR's RCM

Pursuant the adoption of Dodd-Frank Act conflict minerals provision and the expectation of its imminent entry into force, on December 15, 2010, ICGLR officials met in Lusaka, Zambia and adopted six tools of the Regional Initiative against the Illegal Exploitation of Natural Resources of ICGLR (RINR) to curb the illegal exploitation but also to respond to the requirements of Dodd-Frank (Levin et al., 2013). The six tools are:

- the Regional Certification Mechanism
- harmonization of national laws
- regional database on mineral flows
- formalization of artisanal mining sector
- promotion of Extractive Industries Transparences Initiative,
- the whistleblowing mechanism.

The purpose of adopting the Regional Certification Mechanism (RCM) the first tool of RINR was to ensure traceability of conflict minerals in the region within the framework of the implementation of the ICGLR pact on illegal exploitation of natural resources (Resolve, 2012). RCM allows member countries to issue regional certificate to their minerals

for export when they were produced in compliance of the standards set by the mechanism. This certificate is issued after verification of the mine site and user which conditions minerals were produced to exclude those minerals that contravene the regional protocol that bars the illicit trade of minerals that fuel conflicts or whose extraction violates principles of human rights (GAO 2016).

According to Rwandan Ministerial order instituting RCM, this traceability system classifies mines in three categories namely the green label, i.e. mines that satisfy all conditions to receive a conflict-clean certificate, the yellow label is attributed to those mines that still have some issues to fix but are allowed to continue their operations pending getting the green label within a fixed period of time. The third category is made of the non-labeled mines (Republic of Rwanda, 2012a). Any mine in the non-labeled category loses its license and is supposed to close as it is synonymous to conflict mine. In 2015, all Rwandan active mines were labeled green.

Rwanda integrated RCM as a compulsory tool in April 2012 by the Ministerial Regulations Nº002//2012/MINIRENA of 28/03/2012 on the Regional Certification Mechanism for minerals (Republic of Rwanda, 2012a). Rwanda issued its first RCM certificate on 5 November 2013 for Rutongo tin mines located in Rulindo District (Jeroen Cuvelier et al., 2014). Today, any minerals shipment originating from Rwanda should abide by certification requirement and should be accompanied by the ICGLR certificate issued conforming to the notice of 30/12/2015 (RNRA, 2015). ICGLR hires independent third party auditor who carries regular audit in Rwanda and the most recent audit concluded that all the

audited exporting companies and their supplying mine sites conform to the standards of the ICGLR certification scheme (see for example ICGLR, 2016a, 2016b).

The main setback of this mechanism is that ICGLR is not a well-known organization outside the region due to lack of awareness. This hinders the acceptance of the RCM certificate by some key actors in the fight against conflict minerals such as the SEC, the Electronics Industry Citizenship Coalition (EICC) and other initiatives put in place by Western Companies and advocacy groups (Bjurling et al., 2012). This might explain why in addition to RCM, Western companies replicate the same process of due diligence to satisfy the requirements of the Dodd-Frank law that only trusts US and OECD companies due diligence whereas the RCM would satisfy the due diligence process under SEC final rule.

6.3.2 Domestic measures

Domestic policy measures were taken in the view of mitigating effects of the Dodd-Frank Act and overhauling the mining sector that is taken as flagship program for Rwandan socio-economic development. These measures include policy reforms, legal and regulatory measures as well as disciplinary measures against operators who go against laws, regulations and standards established.

6.3.2.1 POLICY REFORMS

The current mining policy was adopted in January 2010. It was drafted having in mind different mining sector reforms to be undertaken. At its later stage, the information about the imminent adoption of section 1502 of Dodd-Frank were available. Thus, the final version of this policy anticipated some actions to be undertaken as a reaction to Dodd-Frank. The policy aims at achieving the following outcomes: (1) streamlining the legal, regulatory and

institutional mining environment; (2) developing targeted investment, fiscal and macro-economic policies, (3) improving mining sector knowledge, skills and use of best practices, (4) increasing productivity and establish new mines, and (5) diversifying mining products and adding value to Rwandan minerals. These five outcomes are expected to lead to the following tangible results: (a) having at least three industrial mines by 2020, (b) minerals export revenues to reach $500 million by 2020, (c) mining employment to reach 50,000 employees by 2015, (d) increasing total exports by $240 million per year by 2020 and increased tax revenue by $30million per year by 2020, and (e) reducing environmental impact (no artisanal treatment in rivers).

Different policy actions later implemented in the framework of mitigating effects of section 1502 of the Dodd-Frank were also implementing the provisions of the mining policy that had anticipated the coming of the conflict minerals provision. In the implementation of this policy, different legal provisions were put in place. They include Ministerial Regulations Nº002//2012/MINIRENA of 28/03/2012 on the regional certification mechanism for minerals. These regulations refer in their preamble to Section 1502 of Dodd-Frank impact on international market access for Rwandan minerals. These regulations compel all persons who deal with 3TG in Rwanda to abide by its provisions. No one is allowed to export 3TG without proper authorization from December 15th, 2012 and uncertified mine sites are not allowed to operate in Rwanda.

The last evaluation of the performance of the mining sector showed that the expected outcomes of this policy were not likely to be met especially outcome (b), (c) and (d) and effects of section 1502 of the Dodd-Frank Act are partly to blame (MINECOFIN, 2017b).

6.3.2.2 INSTITUTIONAL REFORM

Rwanda's mining industry is currently led by the Ministry of Natural Resources and the Rwanda Mines, Petroleum and Gas Board. This is the result of the last changes operated by the Cabinet February 2017. In 2010 when Dodd-Frank was adopted, mines were under the Ministry of Forests and Mines (MINIFOM). In 2011, Forests and mines were put together with land and water to form the Ministry of Natural Resources and at that time mines were given a special treatment at policy level, when a Minister of State in charge of mining was appointed and this lasted until 2016. Allocating a minister specifically in charge of mines raised the profile of mining in Rwanda and resulted into the growth of the sector even if Rwanda was facing the effects of Dodd-Frank. Since October 2016, the minister of state in charge of mining was removed and replaced in February 2017 by the CEO of Rwanda Mines, Petroleum and Gas Board who is also a cabinet member and has a rank of full minister.

At technical level, after the privatization of all mining concessions and liberalization of the mining sector in 2007, OGMR (Office de la Géologie et des Mines du Rwanda) was created to regulate the mining industry in Rwanda. OGMR was a semi-autonomous agency until 2011 when it merged with forests and land agencies to form the Rwanda Natural Resources Board where mining was made a Department of Geology and Mines -GMD led by the Deputy Director General (MINIRENA, 2013a).

Regarding GMD, it had the key responsibility for policy implementation; promoting, regulating, and supervising the industry; and compiling and disseminating data. These are also the responsibilities inherited by the Rwanda Mines, Petroleum and Gas Board. The Board was created after disintegrating Rwanda Natural Resources into separate agencies. The

mining board is an autonomous public agency and is expected to be more active than GMD, a department that was under the bigger board that had three different main department that are not closely related and reporting also to the line ministry. As Petroleum and Gas in Rwanda are not yet developed (still at the exploration stage for petroleum availability and feasibility study for different uses of methane gas), it is expected that the board will in the first place be busy with developing the mining sector. The detailed responsibilities of the Rwanda Mines, Petroleum and Gas Board include:

- Reviewing the existing and generating new key geological and mineral data, operating well-functioning laboratories, evaluating exploration reports of private companies and publically contracted exploration companies;
- Processing mineral licenses applications and managing mineral licenses using the flexi cadaster system;
- Regulating mining companies and cooperatives on mining best practices including safety, security and environmental aspects at all mine sites in Rwanda
- Ensures transparency in minerals produced in Rwanda in partnership with other stakeholders, through tagging minerals from the mine sites to the export level.
- Certifying shipments of minerals (3TsG) to ensure that they are conflict free according to International Conference for Great Lakes Region (ICGLR) standards and ascertaining the chain of custody and due diligence according

to OECD Due Diligence Guidance to ensure that the origin of minerals is known and credible;

- Participating in investment promotion and development of the legal and regulatory framework. It has the following management units (MINIRENA, 2016).

Whereas this is the government agency in charge of policy formulation and implementation, mines are operated by private companies and cooperatives licensed by the Ministry (since February 2017 by the Rwanda Mines, Petroleum and Gas Board). Rwandan mining operators are grouped in the Rwanda Mining Association, an umbrella organization that advocate and build capacity of different miners and exporters.

6.3.2.3 LEGAL REFORMS

In legal field, a lot was done in the framework of the implementation of the mining policy but also to mitigate effects of Dodd-Frank. In 2011, the then Ministry of Forests and Mines issued Ministerial Regulations Nº 001/MINIFOM/2011 dated on 10 March 2011 fighting smuggling in mineral trading. These regulations provide that any operations related to buying and selling, transportation and exportation of minerals requires a permission issued by the competent authorities. Regarding transportation and export, tags that indicate the origin of minerals, quantity and other identity features should accompany mineral consignments. These regulations proscribe importation of minerals without certificate of origin issued by competent authorities in the producing countries and provides that minerals that do not conform to above mentioned requirements are impounded by the Revenue authority or the Office of Geology and Mines. In order to minimize occurrence of smuggling,

activities related to trade of minerals are allowed in specific cities and towns namely Kigali City, Rusizi, Rubavu, Musanze, Nyagatare, Ngoma, Huye and Muhanga that proximate mine sites to avoid smuggling. Regarding penalties, these regulations refer to the Rwanda penal code.

The Organic Law Nº 01/2012/OL of 02/05/2012 instituting the penal code in Rwanda in its article 440 titled "receiving or exporting minerals and quarry substances without authorization" provides that "any person who receives or exports minerals and quarry substances without authorization shall be liable to a term of imprisonment of one (1) year to three (3) years and a fine of two (2) times the amount of the value of the received or exported substances"(Republic of Rwanda, 2012b). This penalty is heavy enough to deter some smugglers and rogue transporters who would be attempted to abet with smugglers to transport illegally acquired or undocumented minerals into Rwanda.

In June 2014, a new Law Nº 13/2014 OF 20/05/2014 on mining and quarry operations was published to cater for the growing mining sector and regulate different issues related to this sector. This law reaffirms ownership of all mineral reserves by the Rwandan state and delegates to the Government the responsibility of awarding mining licenses through public procurement to competitive bidders. This law reduced mining concessions to maximum 400 hectares for large scale mining, 100 hectares for small scale mining and 49 hectares for artisanal mining (art. 10). This allows more space for new mining companies to enter the mining industry if they emerge successful in the bidding process. The previous concessions covered many square kilometers even for artisanal mining. It is worth noting that the exploration license covers 400 hectares in any case. Regarding the duration of the license,

the exploration is limited to four years renewable once after relinquishment of 50% of the explored land. The license for large scale mining lasts for 25 years renewable for further fifteen years each period, the small scale lasts initial 15 years that can be further renewed for 10 years each period while the artisanal mining license expires after 5 years that can be extended in further periods of 5 years each (art. 11). According to the mining and quarry law, mining license can be suspended or cancelled for many reasons including failure to submit reports and document required by different legal and regulatory provisions and failure to satisfy the conditions of a mining license (art. 25). In the past, mining licenses have been suspended or cancelled due to failure to satisfy transparency and traceability requirements in the fight against conflict minerals (Financial Services sub-committee, 2015).

The last in this series is the Ministerial order Nº 00/2MINERANA/2015 of 24/04/2015 on criteria used in categorization of mines and determining types of mines. This legal instrument categorizes mining in Rwanda into three: artisanal mining, small-scale mining and large scale mining. An artisanal mining is the mining operation that is done on an area with estimated mineral deposit of not less than 30 metric tons, with an estimated monthly production of at least ½ ton. The artisanal miner is not allowed to go deeper than 40 meters unless he/she gets special permission. Artisanal mining requires an investment of at least 70 million Rwandan Francs (US$80,000) in 5 years (art. 2-5). The small scale mining is the one done on mine deposit with estimated reserves of 200 metric tons and with a monthly production of at least 3 metric tons and a five year investment of 700,000,000 Rwandan Francs (US$800,000). The small scale miners should use skilled professionals and professional tools and machines in its mining operations (art. 6-9). The large scale mining is

done on an area with estimated reserves of 3,000 metric tons, and a large scale mining company is expected to produce at least 15 metric tons monthly. The investment required for large scale mining is at least 3.5 billion Rwandan Francs (US$4,275,000). In addition to using experts in mining operations and specialized tools such as semi-mechanization, large scale mining companies should have processing plants (art. 10-13).

The reserves are calculated according to exploration reports. The consequences of this law is that different concessions can be divided into different licenses which allows many investors. Likewise, a single company can have more than one license on what used to be its one concessions. This also helps the mining authority to evaluate capacity and capabilities of bidders for different concessions.

The observers of Rwandan mining use this categorization to detect if a mining company carries out fraudulent acts because the size and the investment in a mining site determines the output. The law provides for modalities to change the type of mining otherwise the unexpected increase in production would lead to investigations and penalties for fraud.

It is worthwhile mentioning that this classification of mining activities in Rwanda does not follow the international mining activities classification standards because as earlier mentioned, no Rwanda mining company qualifies to be categorized as medium scale or even upper small scale mining due to low investment (Nishiuchi & Perks, 2014).

6.3.2.4 DISCIPLINARY MEASURES

The anti-smuggling regulations and sanctions against smugglers persuaded some companies from smuggling especially after some companies were suspended. Immediately

after Dodd-Frank was adopted, some companies that had no investment in their concessions changed their smuggling strategy by bringing in eastern Congo minerals and dumping them in their concessions and tag them as extracted from Rwanda. To stop this behavior, in 2012, four mining companies were suspended for this fraudulent activities by Rwandan authorities while the fifth was suspended from iTSCi membership (OECD, 2012)

In 2011, after the audit of the Chanel research, an independent company that carry out a third party audit in the framework of iTSCi reported that Union Mines, a Rwandan mining company was only using its concession to trade in Congo minerals instead of carrying out extraction activities, the Government of Rwanda suspended this company for six months (UNGoE, 2015a).

In September 2015, Kamico, a mining cooperative operating in the Rwandan Western Province allegedly sold its tags dedicated for traceability to smugglers in the eastern DRC and these tags were seized by the UN group of experts who investigate the violations of international law in DRC. Following this illegal behavior Kamico license was suspended and was later cancelled after these allegations were substantiated (UNGoE, 2015a). In October 2015, Rwandan authorities excluded 54 companies from the mineral traceability scheme for unsatisfactory compliance with legal mining transparence standards. Three companies namely RF & GM, Africa Multi- business Line, and SOMIKA that were accused by the 2015 UN Group of Experts on the DRC were among those suspended from the traceability scheme. This means that these 54 companies are not allowed to carry out or participate in any operations of mineral extraction, processing, transportation, or selling in Rwanda (Financial Services sub-committee, 2015).

6.4 Effectiveness of Rwandan policy actions responding to section 1502

When Dodd-Frank was signed into law, DRC government issued a mining ban of its 3TG. The aim of this ban was to stop illegal mining and cross-border smuggling. This measure of the DRC government had consequences on Congolese artisanal miners and it was likely to increase smuggling for survival (Seay, 2012). However, smuggling was avoided due to measures taken by Rwanda against cross-border traders in general and minerals smuggling in particular.

Cross-border trade was not illegalized but it was made difficult due to conditions to be satisfied before minerals can be imported into Rwanda. In order to import mineral ore in Rwanda for re-export, the law provided that the import should have proper documentation including the ICGLR certificate. This means that the importer who want to trade in foreign minerals via Rwanda pays twice for traceability as he/she is obliged to pay traceability fees in Rwanda in addition to what he/she paid in the country of origin of minerals. Besides, the importer is required to pay withholding tax of 15% in addition to other taxes and fees paid by mineral dealers. In total, he/she pays around 24% of the value of the imported minerals. This high fees makes imported minerals noncompetitive and discourages at the same time smuggling and importing mineral ore from neighboring countries as they are likely to tarnish the image of locally produced minerals (Financial Services sub-committee, 2015).

As a sign of good faith, on November 3rd, 2011, Rwandan Minister in charge of Mining returned to DRC a consignment of 82 tons of seized smuggled minerals at different occasions (BBC, 2011). In 2012, another consignment was again returned to Congo authorities. These efforts to stop smuggling paid off as by 2015, smuggling across the border

was significantly reduced (UNGoE, 2015b, para 164; UNGoE, 2016, para 118) despite some reports that some Congo minerals were still being sold to Rwanda based traders by Congolese army officers or transited through Rwanda (Teeffelen, 2012; UNGoE, 2015b, par 158&159). The biggest challenge lies with monitoring of gold from Congo but Rwanda is not among the main regional route of gold trafficking (UNGoE, 2016).

So far, Rwanda has the best mineral traceability system in the region, 100% of Rwandan minerals especially the 3T minerals mined in Rwanda are traceable from the mine site to the smelter. In addition, there is a modern database with detailed information on mining operations, production records, and mineral trading transactions (Financial Services sub-committee, 2015). These efforts of Rwanda to trace its minerals restored its clients' confidence almost at the pre-Dodd-Frank level with exception of tungsten that has difficult to sale as mentioned in earlier sections. In addition, Rwanda managed to maintain employment in mining despite some retrenchment and reduction of price per kilogram for an artisanal miner. Regarding Dodd-Frank Act, Section 1502, it was effective in the sense that it managed to change Rwandan political stance on foreign minerals sold in or transiting through Rwanda where adequate measures were put in place to fight smugglers of Congo minerals. Reforms carried out complying with Section 1502 were beneficial as they contributed to build a strong mining sector and are expected to produce more positive effects in future[44].

[44] The recent mining targets set forward in the 7 year government program 2017-2024 project mineral revenues at US$1 billion by 2024. This is an ambitious target that will only be reached if Rwanda manages to diversify its minerals beyond 3Ts and increase significantly productivity in mining sector that is around 20% as identified by Perks (2016, p. 330) to the full potential.

6.5 Dodd-Frank era policy actions to increase mining output

The figures of Rwanda mining production and revenue contrast with effects of Dodd-Frank Act and this poses questions of understanding the justification behind this increase because Dodd-Frank was supposed to be rather a disincentive for mining output increase. To respond to this concern, I argue that in addition to policy actions taken to mitigate effects of Dodd-Frank, Rwanda also made mining sector one of key priorities and mobilized resources to develop it. These resources mainly focused on capacity building of people who supports the sector and on building government systems to adequately monitor, administer and support the sector. This section talks about policy responses outside those discussed in previous sections that were taken to strengthen the sector and some key actors that drove these policy actions.

6.5.1 Making mining sector a key priority

Mining had been identified since EDPRS I in 2007 as one of the priority sectors. However, no special action was planned to reach the set targets except following the reforms that have already started with the privatization in 2006. It was in 2010 when the Joint Delivery Council (JDC) was created to spearhead key priority sectors that mining was highlighted as a key priority for its potential to contribute to economic growth. The Joint Delivery Council was a high level policy implementation forum chaired by the Prime Minister in which high offices and key ministries and institutions were represented whereas concerned ministries and delivery agencies were invited to discuss how speed up the implementation of priority actions they are driving. JDC was formed on advice of Mr. Tony Blair to President Paul Kagame of the Republic of Rwanda on how to drive change in

implementation of key priority programs[45]. Membership of JDC included senior officials in the Office of the President, Office of the Prime Minister, Ministry of Finance and Economic Planning and Ministry of Local Government and the Rwanda Development Board. It was chaired by the Prime Minister or the Minister for Cabinet Affairs on behalf of the Prime Minister. Mining sector growth was elected on a long list of potential priorities as a quick win but also as a medium and long-term priority for Rwanda. JDC had a strategic advisor from Tony Blair's AGI.

The key priorities to be closely monitored were selected by the JDC and adopted by the Cabinet meeting before implementation. A project known as Strategic Capacity Building Initiative (SCBI) for Capacity building in the five selected priority sectors was designed to support institutions responsible for the key priorities and submitted to different financial partners for funding. The President of the Republic and Mr. Tony Blair committed to mobilize funds for these priorities. Institutions that took part in this project include UNDP, the World Bank, the Gatsby Foundation as well as Howard Buffet Foundation. The project was housed in the National Capacity Building Secretariat that was late upgraded to Capacity Development and Employment Services Board in 2016. SCBI is now in its second phase.

6.5.2 SCBI in Mining

The Strategic Capacity Building Initiative (SCBI) was rolled out as a pilot project in 2011 as a new approach for capacity building that was priority-focused, and delivery-oriented

[45] Mr. Tony Blair, the former UK prime minister launched in Rwanda his African Governance Initiative (AGI) in 2008, a London based charity that had a mission of advising Africa leaders on good governance practices. It is in this framework that Tony Blair deployed a number of strategic advisors to key government institutions in Rwanda from 2008-2012. From March 1st, 2017, Tony Blair's AGI has changed into Tony Blair Institute for Global Change, a not for profit company limited by guarantee.

for the key priorities of the country. This project was developed out of the need to develop industry sector as a lever for economic growth and the 2010 report on Rwanda skills gap that emphasized on lack of local strategic skills to drive the industry sector (Karinda, Mugabe, Finsch, & Hitayezu, 2010). In this pilot phase, four priories namely agriculture, mining, investment and rural electrification were identified and confirmed as beneficiaries of SCBI (AGI, 2014). The first phase of this project focused on on-the-job coaching by international experts to counterpart national (Rwandan) staff that work in these priority sectors.

Mining sector as one of 4 SCBI sectors received special attention. The main objective of SCBI in mining sector was to increase revenues from mining (Beasca, 2014). The main policy interventions carried out in this regard focused on securing the enabling legal and regulatory framework to increase investors trust and confidence. There was a need for clear and stable laws that ensure transparency in the award of licenses, tenure and fiscal stability. The SCBI interventions also targeted building knowledge base in different fields of mining sector such as negotiations with prospective investors. another area of attention was streamlining the certification process, as well as developing the cadaster system that eases the allocation of mining concessions and their easy monitoring and follow up (NCBS, 2014). Last but not least, SCBI supported local staff in acquiring skills to support companies to increase productivity and minimize loss as well as best practices in recovery and processing of minerals.

The main objective of increasing minerals in volume and revenue was achieved regardless of the price fluctuation and consequences of section 1502 of the Dodd-Frank Act that kept pulling down efforts made in the mining sector. In fact, the mining sector registered

a growth of 66% in 2013. However, the target of significantly increasing the GDP share of mining industry was not achieved as the decade average proportion remained around 3%. The specific goals, SCBI experts helped in developing the system through which Rwanda became the first country in the region to issue conflict free certificates that attest due diligence in the supply chain of minerals (AGI, 2014). Together with laws and regulations developed such as mining and quarrying law, mineral loyalty tax and others, Rwanda constituted a strong basis to attract foreign investors in mining sector and a platform for dialogue with regional and international stakeholders on issues related to mining development.

In building capacity and capabilities on government agencies that support mining sector, SCBI helped to establish a Mining cadaster in Rwanda and a Mineral Rights Management System (MRMS), a new system designed to enhance transparency in management of mining sector files and speed up decision making within the sector. SCBI also helped to create and train a cadaster Unit within the Agency in charge of mining and geology to ensure proper responsible for the implementation and proper use of mining cadaster and MRMS (Nishiuchi & Perks, 2014). This system helped harmonize existing licenses and to reduce conflicts on overlapping rights on mining concessions.

6.5.3 Key players in overhauling mining sector

As earlier mentioned, mining sector in Rwanda had been flagged for privatization and liberalization since late 1980s. However, the recent growth of the sector can be credited to relentless efforts of President Paul Kagame whose advice and concrete actions helped the sector to support the economy regardless of the stumbling blocks on the way. The JDC that drove the prioritization in Rwanda was the fruit of discussions of President Kagame and Mr.

Tony Blair. In his meeting with Tony Blair in July 2010, he announced that SCBI will focus on four strategic areas and he himself led the fund mobilization for SCBI together with Tony Blair. During the UN General Assembly of September 2010, he discussed possibility of SCBI funding with the president of the World Bank who willingly accepted that offer (AGI, 2014). Of course Mr. Tony Blair was also a key player not only in mining sector reform but also in convincing the government of Rwanda to have key priorities for better allocation of funds. Tony Blair's AGI deployed consultants that supported the government of Rwanda in general and SCBI in particular (Beasca, 2014).

The role of technocrats cannot be underestimated. As mentioned in chapter 5, section 2, the pre-Dodd-Frank era was marked by divergence in policy and practice. Efforts of technocrats and their advice to the decision making body had an upper hand to private interests and this also weighed in Rwandan compliance. Whereas it cannot be ruled out that some traders and their political friends did not lobby for the preservation of cross-border minerals trade, the decision makers listened to technocrats in charge of mining sector.

As mentioned above, the decision making process in Rwanda is long and quite often starts within RPF commissions where both sides are represented. It culminates in Cabinet where decisions are taken collegially and unanimously, but the weight of President Paul Kagame in shaping the decision is central, especially for the decision quick implementation (Behuria, 2015, 2016). To sum up, the decision to reinforce reforms and comply with Dodd-Frank Act's Section 1502 is credited to different persons but the main is President Paul

Kagame who listened to advice from technocrats as well as friends of Rwanda including Mr. Tony Blair[46].

6.6 Outcome of Rwandan reforms and compliance to conflict minerals provision

Rwandan compliance with requirements of Dodd Frank not only managed to revert the situation but also borne positive benefits to the sector. First of all, the closing up of the lucrative cross-border trade obliged mining companies to increase investments in their concessions. This can be witnessed by the increase of the minerals output from 2012 where the growth was slowed by bad prices and boycott of tungsten in 2014-2015. The trend is expected to continue with the application of the new mining law and policy in the aim of reaching the EDPRS 2 and Vision 2020 target of reaching at least the export revenues of $500 million from mining. The growth is also necessary to cushion expenses occasioned by traceability process to certify the origin of minerals traded by Rwandan operators. Rwanda has already declared that it would keep these systems of mineral certification even if Dodd-Frank was repealed because tracing the origin of its minerals has more benefits than in previous times when there was no such systems (Financial Services sub-committee, 2015).

The coming of section 1502 of Dodd-Frank Act was at the same time a challenge and an opportunity for Rwanda. It was a challenge as it threatened to shut up Rwandan economy by to put a halt to the Rwandan mining sector. It was an opportunity well grasped by Rwandan authorities to end mineral cross-border trade that had undermined the development of

[46] President Kagame is often taken as an omnipotent leader. However, a close look shows that there is a chain of actors in Rwandan decision making of course with different weight that contribute in smoothening the decision making process in Rwanda. Of course some are key depending on their posts either in the government or in the party.

Rwandan mining. Rwanda succeeded in this regard dissuade mineral trading companies to rely on eastern DRC minerals, instead they were encouraged and compelled to invest in their mining concession as per their licenses and this resulted in the increase of Rwandan mining output. In this sense, the coming of conflict minerals provision created by Dodd-Frank Act helped Rwanda to fast-track reforms that have been stalled by the availability on Rwandan market of easily acquired DRC minerals.

Besides, rolling out traceability also helped to modernize Rwandan mining sector as it required some investment and technology. In this regard, databases were put in place to keep data and records related to every known mining deposit in Rwanda. This serves for information but also helps whoever would like to get involved in mining sector in Rwanda to have a good understanding of the sector. In addition to the information availability to potential investors, systematic data collection on every mining deposit helps officials to monitor and supervise mining activities and this has resulted into a better land use and protection of the environment by mining companies or to issue sanctions to companies that do not abide by mining and environmental laws and regulations.

Furthermore, the presence of Dodd-Frank made Rwanda leave its comfort zone and start looking for other solutions to increase mining revenues that were being shrunk by compliance with this law. In this regard, Rwanda has started the process of resuming the tin smelter that has closed its doors in 1985 due to financial losses and Rwanda plan to build two additional smelters one for tungsten and another for niobo-tantalum in order to add value to Rwandan minerals and increase revenues and employment. The second initiative to overcome the burden of Dodd-Frank undertaken by Rwanda was the acceleration of the

exploration of other available minerals as identified by the Rwanda mining plan of 1987. According to Dr. Emmanuel Munyangabe, the Chief Operations Officer of the Rwanda Mines, Petroleum and Gas Board cited by the New Times of 13/2/ 2017, "ongoing airborne geophysics survey has found deposits of several new minerals in different parts of Rwanda, including rare earth elements, gemstones, cobalt, iron and lithium" (Munyaneza, 2017). The new potential in which investment is being sought also includes gold around Nyungwe National Park as well as petroleum oil around Lake Kivu (Perks, 2016). It is expected that exploration and exploitation of these minerals will start soon as Rwanda had invited Chinese mining companies to joint-venture with Rwanda to exploit them and this will ease the burden of section 1502 of the Dodd-Frank (Cab. Res. of 5/4/2017).

Lastly, Rwanda managed to improve its artisanal mining sector and transform many associations into cooperatives that have their own licenses. Whereas there were less than 50 mining licenses in 2008, they were more than 780 in 2015 thanks to the growth and better organization of the artisanal mining sector. According to the World Bank Document, whereas Tanzania and DRC employ many artisanal miners 600,000 and 2 million persons respectively, they have less than half the number of registered small-scale mining companies than Rwanda (Nishiuchi & Perks, 2014).

6.7. Conclusion

To wind up this chapter, it is worth noting that Rwandan mining sector managed to keep grip against effects of Dodd-Frank due to three main reason: firstly, Rwanda had already embarked on reforms of its mining sector and among different reforms were those related to certification of Rwandan minerals. In 2006, Rwanda concluded a 10 year process of

privatization of public held mining concessions and opened the sector to private operators. This called for some reforms to strengthen mining sector and increase its share in Rwandan economy. The second reason is that at the same period, Rwanda together with other countries in ICGLR committed to fight illicit exploitation of minerals. Thirdly, Rwanda had understood that mining sector can be a lever for economic development, thus building a strong domestic mining sector was flagged as a priority. In this regard that Rwanda started putting in place systems to ensure transparency within its mining sector. At first, Rwanda tried minerals analytical fingerprint (AFP) that revealed to be expensive. Its features were integrated in the Certified Trading Chain (CTC) that was run as a pilot phase between 2008 and 2010. Both systems were launched in Rwanda in an attempt to certify the origin of Rwandan minerals. Other institutions were put in place to support mining sector and the economy in general.

Reforms launched in 2006 and 2008 stalled due lack of legal framework to proscribe importation of Congo minerals that took away the attention of Rwanda registered mining companies from adequately investing in their mining concessions. They did the minimum to keep their licenses but did nothing to develop domestic mining. When problems associated with the importation of these minerals occasioned the conflict minerals provision, government officials took this opportunity to proscribe importation of untagged Congo minerals and coerce private operators to meticulously abide by the terms of their licenses.

The reform initiatives launched since 2006 were not sufficient to convince the US to exclude Rwandan minerals in the scope of the conflict minerals provision. However, the availability of CTC became a cornerstone for Rwandan compliance with the conflict minerals provision. Rwanda had anticipated the coming of Dodd-Frank and immediately after its

adoption, it actioned different mechanisms aiming at mitigating effects of Dodd-Frank. The first measure taken was to roll out CTC on all mine sites and make it mandatory. The second measure was to accelerate the implementation of reforms aiming at reinforcing the sector and those aiming at increasing transparency in Rwandan mining and fighting cross-border smuggling. These measures not only resulted into restoring clients trust in Rwandan minerals but also increased of Rwandan mineral output and revenues. However, the growth of Rwandan mining sector was slowed down by bad market prices since late 2014 and the whole of 2015. To mitigate this, Rwanda has reformed public agency in charge of mining to increase its efficiency in supporting the sector and has accelerated the ongoing survey to ascertain the availability of new types of minerals and undersoil resources and there is hope that their exploitation will start in near future. Had Rwanda not been implementing these reforms, it would have taken longer to comply with the requirement of Dodd-Frank's Section 1502 or would have simply opted to resist.

Section 1502 of Dodd-Frank and mining sector reforms in Rwanda mutually supported each other. The reforms helped Rwanda to comply with section 1502 of Dodd-Frank whereas the adoption of section 1502 helped to fast-track the stalled reforms. This led to effective compliance to section 1502 and to the positive outcome reaped by Rwanda's mining sector.

GENERAL CONCLUSION AND RECOMMENDATIONS

The conflict minerals provision created by section 1502 was adopted as one of many ongoing initiatives put in place to stop humanitarian crisis in DRC caused by successive wars. The difference with the previous initiatives is that conflict minerals provision was levied against DRC and its neighboring countries to either punish or dissuade them from fueling DRC war and violence by trading with armed groups operating in that country. Four minerals available in eastern DRC and some neighboring countries were targeted by the conflict minerals sanctions as money from their illicit trade is used by warlords to wage more war to control mineral-rich areas in eastern DRC and the collaboration of neighboring countries to launder these minerals into international market was deemed vital to this trade.

As discussed in chapter 3, the war and violence in eastern Congo has some connection with the Rwanda's recent past. Though eastern DRC was a boiling pot before the 1994 genocide against Tutsi in Rwanda, the massive use of natural resources to wage war and violence started in the aftermath of Rwandan genocide when Rwanda and its allies attacked Congo twice, the first time to forcibly repatriate Rwandan refugees and the second time to remove president Laurent Desire Kabila who was behaving contrary to the interests of allies who put him on power. During these wars, Rwanda was accused to have massively and systematically pillaged Congo natural resources. After Rwandan forces withdrew from Congo in 2003 along other foreign forces, warlords took over especially in the eastern DRC where all these wars were initiated. Though many warlords justify their military operations by the need to protect Congolese civilians, many observers agree that the motivation behind these wars that succeed each other is the benefits these warlords get from illicit exploitation

and trade of abundant natural resources in the region including minerals and the facility to illicitly trade in these resources with or through neighboring countries.

The conflict minerals provision was adopted by the US congress to endeavor destroying the black market of the main four minerals that have been designated as source of income for warlords operating in eastern DRC that were accused to commit war crimes and crimes against humanity as well as other violations of international law. The conflict minerals was designed to affect the entire chain of custody of these minerals starting from producing countries in African Great Lakes region and their mining companies and go through the supply chain to high-tech companies that use these minerals in last resort.

As discussed in details in the fourth chapter, the conflict minerals provision came as a sanction to the Rwanda for directly or indirectly assisting armed groups in Congo to use their territory to sell the illegally acquired minerals. The US government intended to financially affect armed groups via countries and foreign companies that traded with them. In this sense, section 1502 of the Dodd-Frank Act targeted Rwanda to change its political behavior in relation to war and violence in eastern DRC by inflicting upon it economic pain through discriminating its minerals on international market as long as they are not duly certified.

Rwanda, due to its history of active participation in DRC wars and accusations leveled against it about support to armed groups operating in Congo and direct and indirect plunder of Congo minerals, basing on its proximity and same geological endowments with eastern DRC, was specifically targeted and was one of the most affected. As discussed in chapter 5, Rwanda is vulnerable to is mining sector, where 3Ts contribute more than 30% of

Rwandan total exports, made Rwanda susceptible to the effects of Section 1502. When it was threatened by Dodd-Frank Act's effects, Rwanda had only two options: to comply with Dodd-Frank requirement or resist it. Rwanda chose to comply despite the prediction of economic sanction theory that economic sanctions rarely make target countries change their political behavior.

This study shows that the Rwandan effectively complied with the requirement of section 1502 of the Dodd-Frank. The straight forward choice of complying with section 1502 of the Dodd-Frank is explained by the combination of two factors namely vulnerability and the pre-existence of policy reforms that were compatible with the requirement of section 1502 of Dodd-Frank Act i.e. to certify that minerals traded by Rwanda are effectively mined in Rwanda, or if otherwise, do not finance war in Congo. The conflict minerals negatively affected Rwanda but history has shown that however painful economic sanctions can be, target country have failed in most of cases to change their political behavior, instead, leaders used these sanctions to mobilize citizens and build strong nationalism. The list of examples is long: Burundi, Belarus, Cuba, Iran, North Korea, Zimbabwe and others. This study suggests that Rwandan decision to comply was not a mere result of effects of the sanctions. This study suggests that Rwandan compliance was motivated by the political and technical ease to comply thanks to ongoing policy reforms in mining sector, where Rwanda had already embarked on certification and traceability of the origin of minerals Rwanda sells on international market. Thus it was easy for Rwanda to comply as the reforms were in the line of the section 1502 requirements.

At the coming of section 1502, Rwanda had already started to implement the mineral traceability systems and had partnered with international agencies to certify the origin of every mineral Rwanda exports in order to differentiate them from minerals of neighboring countries that are not certified and potentially fund armed groups operating in the region. In addition to reforms aimed at enhancing transparence, Rwanda took internal policy measures to strengthen the sector and to fight against smuggling across the border.

Rwandan compliance to the requirement of Dodd-Frank Act was a rational choice because, though painful, the requirement was in line of the reforms that have been undertaken since 2006 when the privatization process was concluded and liberalization of the mining sector introduced. The implementation of these reforms had stagnated due to cross-border trade in Congo minerals by different mining and exporting companies as it was easy and economical for them to buy minerals from eastern DRC without any other investment. Thus, Dodd-Frank's section 1502, by criminalizing uncertified minerals from Congo, gave Rwandan authorities the justification and the opportunity to force back mining company to abandon buying minerals from Congo and invest in their Rwandan concessions. They were given choice either to focus on internal production or lose their licenses. This was easy because of the pressure of international buyers grouped in CFSI after the adoption of Dodd-Frank Act was adopted. It was also facilitated by the fact that DRC decreed mining ban in its eastern provinces immediately after section 1502 was adopted. When DRC opted to freeze mining of the targeted minerals pending putting in place traceability systems, Rwanda took advantage of its domestic security and conducive investment climate and the existing reform

framework to fix its traceability process and attract investors. In this period, mining licenses grew from 120 in 2010 to more than 780 in 2015.

To reinforce traceability of minerals origin and dissuade companies from illicitly importing Congo minerals, Rwanda rolled out CTC system that had been running as a pilot project since 2008 when it was launched in Rwanda by BGR. However, it is ITRI that migrated to Rwanda after DRC had frozen all mining activities in eastern Congo that quickly took over the traceability process and replaced CTC by iTSCi since 2011. ITSCI has some advantages over CTC as it is user friendly and its tags can be easily traced from the mine site to the smelter. To enhance transparency, Rwanda was the first country to issuing ICGLR regional certificates for every mineral shipment exported since 2013. Today, every mineral shipment has to be accompanied by iTSCi tags and the ICGLR certificate. In its compliance process, Rwanda chose to partner with international credited agencies that supervise what Rwanda is doing. In addition, Rwanda reviewed and reinforced its internal policies related to mining operations and mineral trade. All these policy actions not only mitigated effects of Dodd-Frank's Section 1502 but also helped the mining sector to grow and to support the economy. Actions undertaken in compliance of section 1502 of Dodd-Frank resulted as expected in the increase of mineral output from 2011 and volumes keep growing. However, there were bad prices in 2015 that slowed down the growth of mining sector. Since the second half of 2016, the prices were better and there are expectations that the sector will keep growing to reach the provisions of EDPRS 2 of earning US$500 by 2018.

However, Dodd-Frank is still there. As a long term solution, Rwanda is trying to mitigate the pressure of Dodd-Frank by building a robust certification system for the

concerned minerals but also to diversify mining product beyond the 3Ts that are concerned by the provision because other concerned countries have managed to get away with Dodd-Frank because the 3Ts are not their main traded minerals.

The transformation of mining sector to respond to the requirement of Dodd-Frank Act and to support national economy could not have been achieved without key political actors and advisors. In order to give impetus to the mining sector and to dismiss the fear caused by Dodd-Frank Act adoption, the President of Rwanda, Mr. Paul Kagame together with former UK prime minister Mr. Tony Blair (who was advising him) launched the project to support capacity building in the key priority sectors including mining and led the campaign for fund mobilization for this project. The implementation of the project together with the delivery of the key priorities was driven by the Joint Delivery Committee, a high level committee that ensured that all targets and key performance indicators are met on time and that the road map agreed upon is respected.

The case of Rwandan compliance with section 1502 confirms my hypothesis that though vulnerability is important in the calculation of the sender in levying economic sanctions, the existence of a conducive policy setting in the target country prior to levying sanction is detrimental in determining whether the target country would comply or resist the sanctions. When the internal policy setting is favorable or can easily accommodate the demand of the sender, the target states easily complies with the requirement and this yields to the effectiveness of the sanctions. In the contrary case, countries chose to resist sanctions. This quite often happen when a prior policy that is domestically considered as strategic or politically vital is aimed at in levying sanctions. In this case, changing this policy is suicidal

for political leaders. The recent case of land redistribution in Zimbabwe whereby political leaders had to choose between massive domestic support and the minority white colonial settlers[47] backed by their countries of origin (Masaka, 2012; Sims et al., 2010). The same happened in Burundi where the international community issued economic sanctions to force the current president Pierre Nkurunziza to vacate power after his constitutional two terms (GreenbergTraurig, 2015; UK Parliament, 2015). The president and political leaders resisted as this was strategic for their survival and were backed by their majority ethnic Hutu population.

In the case study, though Rwanda was targeted for its alleged behavior in Congo, the preexisting policies were clear in regards to transparency and certification. What was needed was the implementation rather than putting in place completely new policies. After the coming of Dodd-Frank's conflict minerals, Rwanda just reinforced its implementation and reviewed the existing policies to tighten them and this was politically easy to do than putting in place completely new policies. Thus, the existing of policies, even with sluggish implementation is important in deciding positive response to sanctions whereas the absence of or the existence of offending policy encourages resistance to sanctions.

[47] In Zimbabwe, 4,500 white commercial farmers owned almost all arable land of Zimbabwe. They inherited it from colonial white settlers who grabbed it from indigenous black during colonization. In 2000, Zimbabwe government decided to redistribute land to blacks without compensation to white farmers and this triggered discontent in UK and USA that later decided to issue economic sanctions against Zimbabwe. Even though sanctions seriously affected Zimbabwe economy and social welfare, political leaders resisted them because redistribution gave them support of black citizens that recovered their land rights (Sims et al., 2010).

From this study, I propose a number of policy recommendations that I hope if they are implemented can help not only in the current situation of conflict minerals requirement effectiveness but also in similar situations:

1. In most cases, economic sanctions are meant to change the existing policies that are considered unethical. Thus, a good understanding of the ongoing policies prior to levying sanctions would help in increasing the probability of their effectiveness. Knowing whether or not an existing policy has some room to accommodate changes wanted by the sanction sender would help in engaging the target country to comply with the sanction.
2. Rwanda diversification of mineral products is good but should not distract from keeping complying with Dodd-Frank Conflict minerals requirement as long as it is not yet terminated as the 3T will remain the main Rwandan exported minerals for a couple of years;
3. Rwanda should work aggressively on diplomatic side to improve Rwandan image especially among lobbies for giant manufacturing companies as some researchers out there still think that Rwanda does not have minerals in its soil. Moreover, Rwandans and friends of Rwanda should research and write on Rwandan compliance on conflict minerals and its triggers as little is known about what is being done by Rwanda;
4. Reform efforts that took place in mining sector can serve as best practice in other strategic and priority sectors in order to pull together all available energy to push reforms ahead.

5. Scholars from the African Great Lakes should write their own region's story as almost all papers available are sponsored by companies and western research institutions that might be having little shared interests with the population of the great lakes region
6. The conflict minerals provision should not be taken as panacea for eastern DRC violence as the compliance of Rwanda did not improve significantly the humanitarian crisis as there are a variety of natural resources on which armed groups can use for funding as long as they have a good reason to wage a war.

This study limited itself to 2016 as the issue of conflict minerals is ongoing and any change can happen anytime. There are a lot of information coming especially from the US, the issuing state. There is a need for further research in future to assess the actual effects of this law. There is also a need to conduct a case study on Rwandan companies of different size to understand variances in effects depending on the size and output.

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