

https://dspace.org/

Intellectual Property and Regional Trade in the Southern African Development Community: Intellectual property and regional trade in the Southern African Development Community

Hakizimana, Nadine

2019

https://hdl.handle.net/10539/29354

Hakizimana, Nadine, (2019) Intellectual property and regional trade in the Southern African development community, University of the Witwatersrand, Johannesburg, https://hdl.handle.net/10539/29354

Downloaded from a DSpace repository. https://dspace.org/

UNIVERSITY OF THE WITWATERSRAND

DEPARTMENT OF INTERNATIONAL RELATIONS

Master of Arts in International Relations Research Report

28 June 2019

Intellectual Property and Regional Trade in the Southern African Development Community

Name: Nadine Hakizimana

Student Number: 851557

Supervisor: Dr Mopeli Moshoeshoe

Word Count: 27 000

CONTENTS

CONTENTS 2
DECLARATION 4
ACKNOWLEDGEMENTS 5
ABBREVIATIONS 6
CHAPTER 1 8
BACKGROUND: INTELLECTUAL PROPERTY-TRADE LINKAGE 8
INTRODUCTION 12
METHODOLOGY 14
Research Question(s) 15
Specification of Variables: 15
Research Design 15
Objectives of The Study 16
The aim of The Study 17
Rationale 17
LITERATURE REVIEW 19
Introduction 19
Origins of Discourses around IPR in Trade 19
The case for IPR in Trade 21
The case Against IPR in Trade 23
Gaps in the Literature 25
UNDERSTANDING THE CONCEPT OF INTELLECTUAL PROPERTY RIGHTS 26
Patents 26
Copyright 27
Trade Marks 27
Trade Secrets 28
Unfair Competition 28
Conclusion 29
CHAPTER 2 30
HISTORY OF IPR ON THE AFRICAN CONTINENT 30
Introduction 30

1883 – 1935: IPR as an instrument of Colonialism 30
1936 – 1965: IPR as a Neo-Colonial Reaction to Independence 32
1966 – 1995: Attempts to exclude Africa from Global IP Norm-Setting 33
1996-2018: Africa Paving their Own Way in IPR 35
Conclusion 37
CHAPTER 3 38
CASE STUDY OF THE SOUTHERN AFRICAN DEVELOPMENT COMMUNITY 38
Introduction 38
IPR in the Southern African Development Community 38
IP Provisions in the SADC Protocol on Trade (1996) 40
Push and Pull Factors that Determine SADC international IPR Harmonization 41
The EU-SADC Economic Partnership Agreement 47
The African Growth and Opportunity Act (AGOA) 48
The African Continental Free-Trade Area 49
IMPLEMENTING IPR IN SELECTED SADC STATES 51
Progress and Challenges 51
INCENTIVES AND DISINCENTIVES FOR IPR IN SADC 58
Are IPR's Boon or Bane? 58
Conclusion 65
CHAPTER 4 66
THE SADC EXPERIENCE 66
Introduction 66
Policy Harmonization 66
Policy Disharmony 71
Conclusion 73
CHAPTER 5 74
CONCLUSION 74
RECOMMENDATIONS 76
BIBLIOGRAPHY 79

DECLARATION

I declare that except for the reference to other people's works, which have been duly acknowledged, this report is my own unaided work. It is submitted for the degree of Master of Arts in International Relations at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any other degree or examination in any other university, neither has it been published by any other person or organisation.

Signature:……..

28 June 2019.

ACKNOWLEDGEMENTS

Most importantly, I would like to thank my supervisor Dr Mopeli Moshoeshoe for guiding me through the writing process of this study. Similarly, I sincerely thank Dr Michelle Small who provided advice and emotional support in the beginning stages of writing this thesis. I also thank the Intellectual Property Rights Initiative (IPRI – Africa) for their helpful comments and resource suggestions.

To my family - my older sister, Nancy Hakizimana who sacrificed so much of her time to drive me to and from university, as well as proofreading my paper I am truly thankful. Lastly, to my mom Albertina Hakizimana and dad Jean-Marie Hakizimana, for the encouragement, financial support and understanding throughout my post-graduate studies, I am eternally grateful.

ABBREVIATIONS

ACTA - Anti-Counterfeiting and Trade Agreement

AfCFTA - Continental Free-Trade Area

AGOA – African Growth and Opportunity Act

AIDS – Acquired Immune Deficiency Syndrome

ARIPO - African Regional Intellectual Property Organization

BIRPI – United International Bureaux for the Protection of Intellectual Property

COMESA - Common Market for Eastern and Southern Africa

EAC - East African Community

EPA - Economic Partnership Agreement

ECOWAS - Economic Community for West Africa

EU – European Union

FTA - Free Trade Area

GATT – General Agreement on Tariffs and Trade

HIV – Human Immunodeficiency Virus

IKS – Indigenous Knowledge Systems

IP - Intellectual Property

IPIC – Intellectual Property in Respect of Integrated Circuits

IPE - International Political Economy

IPR - Intellectual Property Rights

IPRI – Intellectual Property Rights Index

LDC - Least Developed Country

NIPMO - National Intellectual Property Management Office

OAPI - Organization Africaine de la Propriété Intellectuelle

OECD – Organisation for Economic Co-operation

PCT - Patent Cooperation Treaty

REC - Regional Economic Communities

RISDP - Regional Indicative Strategic Development Plan

RTA - Regional Trade Agreement

RSO - Regional Standardization Organization

SADC - Southern Africa Development Community

TPP – Trans-Pacific Partnership

TFTA - Tripartite Free Trade Agreement

TRIPS - Trade-Related Aspects of Intellectual Property Agreement

UNCTAD - United Nations Conference on Trade and Development

UPOV – International Union for the Protection of New Varieties

WIPO - World Intellectual Property Organization

WTO - World Trade Organization

CHAPTER 1

BACKGROUND: INTELLECTUAL PROPERTY-TRADE LINKAGE

The origins of attempts to consolidate intellectual property as an issue in international trade can be traced to the 1960s and 1970s. This IP-trade linkage was spearheaded by the US in multilateral forums like the United Nations Conference on Trade and Development (UNCTAD) and the World Intellectual Property Organization (WIPO). During this time the IP-trade linkage failed to receive global traction and developing countries were exempt from implementing intellectual property rights in their national systems[1]. However, in the mid-1980's and onwards, this special treatment for developing countries in the global IPR system changed due to efforts by the United States to protect the proprietary rights of US companies particularly in its largest trading partner countries at the time, including Argentina, Brazil, China, India, Singapore, South Korea and Taiwan.[2] Later in 1994, the US tightened its global IP harmonization agenda by lobbying for the international community to globalize intellectual property rights by linking it to international trade. This idea was tabled for negotiation towards the end of the Uruguay Rounds of the General Agreement on Tariffs and Trade (GATT) in 1994. The conclusion of these trade talks also marked the end of the GATT era and the start of the World Trade Organization (WTO) era.

This along with US pressures during the WTO Uruguay Rounds lead to the formation of the Trade-Related Aspects of Intellectual Property Agreement (TRIPS) administered by the World Trade Organization (WTO) on 1 January 1995. Essentially it provided a rule of law for bilateral and multilateral trade disputes on IP matters as opposed to the unilateral IP agreements of the 1980s, making IP law and enforcement truly globalized. This rule of law is based on the idea that if a new invention enters the trading market, other competitors will naturally try to come up with better configurations rather than simply copying the same product as the original - facilitating the idea of legitimate trade. The TRIPS agreement has changed the character of intellectual property rights

[1] Paul David, Intellectual property institutions and the panda's thumb: patents, copyrights, and trade secrets in economic theory and history. *Global dimensions of intellectual property rights in science and technology* (National Academies Press, 1993), *19*.

[2] Bila Mirza, *A DILEMMA OF INTELLECTUAL PROPERTY RIGHTS♦ FOR DEVELOPING COUNTRIES?* (The Paper is Part of the Exam on Economics of Technological Innovation", A PhD Session Led by Bart Verspagen UN University-MERIT, the Netherlands.[5]. Dorchester County, Definition of Terms, 2005), 5.

across the world by affirming that intellectual property is indeed trade-related.[3] By way of the TRIPS agreement, IP matters have become intrinsically linked to the multilateral trading system.

With the mainstreaming of TRIPS into the international community, many developing countries were under some pressure, especially African countries mainly due to the HIV/AIDS epidemic in the early 2000s. This prompted a shift in the IPR implementation strategy of developed countries – towards a social welfare approach. In an effort to provide leeway to developing countries, the WTO allowed exemptions for developing and least developed states from full compliance to TRIPS – known as TRIPS flexibilities. Part of this flexibility meant that low and middle-income countries were granted a transition period for which they would only be required to comply with TRIPS provisions by 2005 while least developed countries were given until 1 January 2016 to comply with TRIPS. Today this transition deadline has been extended to 2021 and may be extended further. Thus, TRIPS flexibilities represent an effort by the WTO to provide some leniency to sensitive sectors like the health sector which is at the forefront of the TRIPS controversies. The WTO also conceded to the needs of developing countries with the accession of the Doha Declaration adopted in 2001 which stipulates that countries have the right to decide in which cases there is a need to override TRIPS obligations particularly when there is greater public interest. The concessions of the Doha Rounds represent a small victory for developing countries.

However, in the 23 years since the establishment of TRIPS there have been some important outcomes and potentially harmful implications of the IP-trade linkage that is worth acknowledging. The TRIPS agreement is argued to be the most comprehensive and equally controversial multilateral agreement on intellectual property because it criminalizes any infringement of its IP standard. These IP standards define knowledge as private property that needs criminalized protection from theft. The TRIPS agreement has been argued to be a stepping stone to an era of imposed strict intellectual property rights (IPRs). There has been widespread opposition to stricter IPR in both bilateral and multilateral trade agreements. Particularly in terms of whether IP laws enforced in developed countries are applicable to developing countries. Concerns about the unfair nature of multilateral international trade agreements to developing countries have been expressed

[3] Daniel Gervais, *The TRIPS Agreement: Negotiating History*. (London: Sweet & Maxwell, 2012), pp. Part I.

by economists like Stiglitz [4] and Samuelson[5]. They argue that trade agreements largely favour developed countries over developing and least developed countries.[6]Trade agreements have received the majority of the backlash for imposing IP conditions that are not suited to developing and least developed countries. More and more, IP standards enshrined in trade agreements have become a mandatory condition for trade rather than optional. FTA's are increasingly being formed with the precondition that states must comply to TRIPS obligations in order to engage in free trade even when they are not a member of the WTO or when they are eligible for TRIPS flexibilities.[7] Some countries have also strategically used TRIPS-Plus provisions – which are more stringent IP standards, in trade agreements to protect their national economic interests.[8] In many instances, such inclusions have negative implications on public health, agriculture and trade competition in developing countries. Strict IPR in FTA's allow developed countries to maintain a monopoly on innovations that developing countries are forced to buy at high prices. They also impose harmony of IP standards with trading partners and states who enter such agreements, forfeit the discretion to decide what types of IP can be protected.[9]

For example, The Trans-Pacific Partnership imposed strict IP conditions that were detrimental to the public health sector as well as cultural and digital rights sectors of developing countries - representing a failure for the IP-trade linkage.[10] Another major multilateral failure in the space of IP is seen in the Anti-Counterfeiting and Trade Agreement (ACTA) which saw some developed countries attempting to advance an IP policy that was not beneficial to developing countries.[11] Although these agreements are not discussed in detail in this paper, they can act as a warning to other developing countries who may enter into trade negotiations on IP matters in future. These

---

[4] Joseph Stiglitz, *Globalization and development, (*Held and Koenig-Archibugi, 2003), 47-67.
[5] Pamela Samuelson, *Challenges for the World Intellectual Property Organization and the Trade-related Aspects of Intellectual Property Rights Council in Regulating Intellectual Property Rights in the Information Age*, European Intellectual Property Review, 1999), 578-591.
[6] Joseph E Stiglitz, *Democratizing the International Monetary Fund and the World Bank: governance and accountability.* (Governance, 2003), 111-139.
[7] Ruse-Khan, Henning Grosse, *The international law relation between TRIPS and subsequent TRIPS-Plus free trade agreements: Towards safeguarding TRIPS flexibilities?*. (Journal of Intellectual Property Law 2011), 4.
[8] Ibid.
[9] Henry Kibet Mutai, *Intellectual Property Rights Promotion and Protection under the Tripartite Free Trade Area (TFTA): Proposals for an Intellectual Property Protocol*, (Tralac Working Paper, 2016)
[10] Michael Geist, "*The trouble with the TPP's copyright rules." The Trans-Pacific Partnership and Canada: A Citizen's Guide. Edited by Scott Sinclair and Stuart Trew. (*Toronto: James Lorimer & Company Ltd, 2016), 158-68; See also
[11] Caroline Ncube, *Intellectual property rights and innovation: Assessing regional integration in Africa* (Aria VIII, 2017).

agreements exposed protectionist stances seeking to protect national sovereignty even in sensitive areas of the public domain that require safeguards like the public health sector. These agreements attempted to nullify TRIPS flexibilities granted to developing and least developed countries. Thus, due to the failures around IP witnessed in trade agreements like the TPP and ACTA there is some apprehension about incorporating IP matters in current and future free trade agreements.[12]

However, there is still a loophole in the current global IP-trade system that developing, and least developed countries could maximize. India presents itself as a good example of how developing countries can strategically use the prevailing IP system to serve their developmental challenges. The case of India proves that it is not impossible to bypass some of the TRIPS obligations by making use of their low- and middle-income economic status to maximise the intended benefits of TRIPS flexibilities. India has managed to use their TRIPS flexibilities to provide patents to generic pharmaceutical companies even when the same product has already been patented, allowing for the sale of cheaper medications.[13] This has been particularly helpful to HIV/AIDS infected individuals in other developing countries who import cheaper medications from India.[14] This is discussed in more detail later in the study. Similar to India, several other developing nations also started to adopt IPR by their own accord. However, it is not always clear whether the drive to implement IPR in these countries is attributed to coercive international agreements or whether there is truly a growing appreciation for IPR in developing countries.

[12] Daniel Gervais, *The TRIPS Agreement: Negotiating History*. (London: Sweet & Maxwell, 2012), pp. Part I.
[13] Ibid., 511
[14] Ibid., 512

INTRODUCTION

The international agenda for IPR harmonization has led to the adoption of IPR across the world that is not always sensitive to the context of developing countries. This paper investigates intellectual property policy harmonization from an African-regional perspective, but the findings can also be extended to a developing-country perspective. Regional economic communities (RECs) like SADC gained prominence as a result of multilateral trade negotiations of the World Trade Organization (WTO) during the Uruguay and the Doha Rounds. This encouraged increased negotiations for Regional trade agreements (RTAs) in order to expand market access for products. As markets expanded, intellectual property rights became an increasingly important aspect of bilateral and multilateral trade and thus were introduced to regional trade agreements.

This paper starts by considering international pressures that SADC member states face to enforce stricter intellectual property regimes from the WTOs Trade Related Aspects of Intellectual Property Agreement - known as the TRIPS Agreement. Such agreements impose fundamental intellectual property challenges that require a comprehensive and coordinated regional strategy from SADC. The WTO set the minimum requirements for IPR that all members must abide by in the TRIPS Agreement however some countries opt to go beyond the minimum requirements to have stricter intellectual property protection - it becomes clear throughout the study how this affects the policy decisions of SADC and its member states. A historical timeline of IPR types and approaches to IPR on the African continent is also presented – which will help to gauge where present-day circumstances may stem from. After that, a case study analysis of the SADC REC will explore how SADC manages the multiple layers of IP commitments from international organisations as well as trade agreements that impose IP conditions. The case study will also highlight the opportunities and challenges involved in incorporating IP matters into regional integration agendas. The SADC intellectual property policy provisions found in the SADC Protocol on Trade policy document is the main point of reference for the case study, but other regional intellectual property frameworks will also be drawn upon to facilitate the policy analysis comparatively. These include policy documents from the African Regional Industrial Property Organization, Organization Africain de la Propriété Intellectuelle, COMESA, the EAC, The Cotonou Agreement, as well as the Continental Free Trade Agreement.

Although heads of states across the world often articulate aspirations to move from industrial economies to knowledge-based economies and recognise IP systems as an essential component of a knowledge economy, there has been little progress for African countries in this regard. This study intends to explain some of the policy decisions of SADC and its member states based on the options they are presented with. Perhaps the interest in IPR development is driven by international pressures, or perhaps this interest represents an effort by African countries to forge their own way in the space of IP that will eventually depart from the prevailing international IPR agenda. Understanding the available policy options may assist in maximising the intended benefits of an African regional intellectual property regime within the Southern African Development Community (SADC) – particularly in terms of advancing innovation and achieving economic competitiveness.

METHODOLOGY

The research methodology that is used throughout this dissertation is discussed below. It intends to stipulate and explain why the mentioned parameters best suit this study. Before outlining the approach that is taken to conducting this research, it is necessary to understand what the research problem is. A statement of the problem gives rise to the research question(s) that the study seeks to answer. Thereafter the research design outlines the type of research, the objectives, the aim, and the methods of data collection in order to understand the practical steps that have been taken to answer the research question. Lastly, a rationale is provided which explains the significance of the study.

Statement of The Problem

In line with the attitude of developing countries across the world, intellectual property matters seemed to have been accorded low priority by SADC at the time when IP became linked to international trade. This is demonstrated by the absence of IP in the SADC Treaty of 1992, and similarly in the Regional Indicative Strategic Development Plan (RISDP) of 2000 where there is no reference to intellectual property, suggesting that it was not seen as a priority to members at the time that SADC was established. However, after negotiations and the revision of the RISDP for the period 2015-2020, IP protection was recognized as an important component in reaching the SADC regional economic objectives that are stated in the SADC treaty. Accordingly, intellectual property matters have secured an important position in the SADC regional integration agenda[15]. However, this shift in stance to IP matters appears at first glance to be arbitrary and unnecessary given the research evidence of the adverse implications of IPR in developing countries. This is the basis of the research problem. It is questionable whether the consequences of domestic, regional and global IPR's are fully acknowledged by SADC.

[15] Kamariah Izaidin Abdul Ismail, Wan Omar Majid,and Zaidi Wan, *Commercialisation of University Patents: A case study. (*Journal of Marketing Development and Competitiveness, 2011), 80.

Research Question(s)

The overarching question that this study addresses is: Does the current SADC Protocol on Trade support efforts to harmonise the intellectual property rights obligations of the Southern Africa Development Community?

The following sub-questions are addressed in order to answer the above-mentioned overarching research question. They each represent three sets of policy obligations that SADC is expected to abide by. They are as follows:

1. Why (or why not) are there discrepancies between the global IPR harmonization agenda in the TRIPS agreement and the intellectual property provisions of the SADC Trade Protocol?

2. Why (or why not) are there discrepancies between the intellectual property provisions of the SADC Protocol on Trade and domestic policies of member states?

3. Why (or why not) are there gaps in the implementation of Southern African states' commitments to global and regional agreements on intellectual property?

Specification of Variables:

Independent variable: Accession to global IPR harmonization agenda

Dependent variable: Existing policies in place

Research Design

This research makes use of qualitative case study methods to examine why existing intellectual property policies are structured the way they are – whether commitments to IP were imposed or independently acceded to. Qualitative research seeks to provide a comprehensive description or explanation to better understand a phenomenon.[16] This method will be used to conduct a document analysis of the national intellectual property policies of selected SADC member states including - South Africa, Botswana, Malawi, Zambia and Zimbabwe. This is done through case studies and

[16] Babbie, E. and Mouton, J., *The practice of social research*. (Cape Town: Oxford University Press, 2010), 123.

comparing them to the SADC regional intellectual property framework found in the SADC Protocol on Trade as well as international IP and trade agreements. Other regional frameworks for intellectual property will also be drawn upon as comparative examples such as the African Regional Intellectual Property Organization (ARIPO), IP policies of other REC's like COMESA, the EAC and ECOWAS. It will then turn to analyse related patterns and trends of intellectual property rights protection, administration and enforcement in the five selected SADC member states. Thereafter, this study explores the challenges that each of these countries are faced with when attempting to implement international legislation for intellectual property protection. The findings from a case study need to be generalizable and be able to be applied to the entire phenomenon[17] - in this case, it is intended for the findings of this study to be generalizable to other regional economic communities in the developing world.

Objectives of The Study

The objective of this paper is to explain the IP-related policy decisions and priorities of SADC. This is done by discussing the multiple layers of intraregional, interregional as well as multilateral commitments in the space of IPR and assessing why there is consistency in some cases and inconsistency in others. A policy review has been conducted of the IPR provisions found in the SADC Protocol on Trade along with individual domestic policy obligations as well as TRIPS obligations. Based on the findings of this review, the study has identified some of the incentives and disincentives involved in incorporating intellectual property rights in the SADC regional integration agenda. Thereafter it is decided to what extent those incentives and disincentives have driven SADC to enhance efforts to harmonise IPR.

Methods of Data Collection

This study depends extensively on secondary data that is available in the public domain, referring to policy documents and internet posts that provide relevant information to the study. Namely, it involves an analysis of the SADC Protocol on Trade document, domestic intellectual property policy from the selected SADC countries have also been analysed along with overlapping international intellectual property frameworks in the TRIPS policy. It also draws upon publications

[17] Anol Bhattacherjee, *Social science research: Principles, methods, and practices.*(University of South Florida: Scholar Commons 2012), 9.

from additional international organizations like the World Intellectual Property Organization (WIPO), The African Regional Intellectual Property Organization (ARIPO) and the United Nations Conference on Trade and Development (UNCTAD). All these documents have been sourced online, and any additional policy information has been sourced from articles, journals and relevant books.

The aim of The Study

This study aims to identify the incentives and disincentives of incorporating intellectual property rights in the SADC regional economic community and ultimately to explain why discrepancies in policy implementation may or may not exist. A series of practical steps are necessary in order to fulfil the research objectives successfully. Firstly, this study reviews the SADC regional intellectual property framework. The SADC Protocol on Trade policy document is the main point of reference for this study. Additionally, the domestic intellectual property policy of five selected SADC member states – namely; South Africa, Botswana, Zimbabwe, Malawi and Zambia are briefly reviewed. Although this does not reflect the stance of SADC as a collective, it does assist in determining to what extent national policies impact IPR harmonisation. This study also reviews the international intellectual property landscape – particularly the legally binding TRIPS agreement and assess to what extent it benefits or hinders SADC regional ambitions. This study then concludes by explaining why IPR harmonization has worked in some cases and why there are discrepancies in others. It also aims to articulate the opportunities and challenges for governments in SADC member states when using intellectual property to enhance trade at a regional level.

Rationale

This topic finds relevance to International Relations through the international political economy (IPE), and regional studies. One of the major challenges that African countries face is how to transition from having a natural resource dependent economy to a knowledge-based and industrialised economy[18]. This paper is particularly important given the ambition of African leaders to breed an innovative society and transitioning towards knowledge-based economies[19]. This study can serve as a model for how developing countries can strategically organise regionally

[18] Mike Morris and Judith Fessehaie, *The industrialisation challenge for Africa: Towards a commodities based industrialisation path.*, (Journal of African Trade , 2014), 25-36.
[19] Ibid.

to achieve economic expansion or otherwise serve as a warning – exposing unfair power dynamics in international trade and intellectual property systems.

The primary target group that this study seeks to reach are the governments of SADC member states. A second target group includes African policy makers in regional cooperation sectors such as the African Regional Standardization Organization (RSO), which works with different African governments to advance an integrated commercialisation model. This study can also be relevant to managers in the private and public sector who work on value-chain development for economic expansion. In light of commercial benefits of protecting IPR, as stated by the WTO and empirical studies that show how IPR has a positive impact on trade[20], this study serves the purpose of encouraging value-chain development of knowledge systems in order to receive a return on research, innovations and any other intellectual property investments. Ultimately this study will contribute to the body of knowledge that seeks to understand the relationship between innovation, regional integration in free trade agreements and global market economics.

[20] Mohammed Rafiquzzaman, *The impact of patent rights on international trade: Evidence from Canada*, (Canadian Journal of Economics, 2002), 307-330.

LITERATURE REVIEW

Introduction

The following literature review outlines work from some of the major authors in the field of intellectual property and trade. The number of academic writings on the link between IPR and trade grew significantly between the 1990s and 2000s. However, there is some disagreement among authors about the dynamics of the IP-trade linkage. The following literature review outlines the most relevant themes and discourses in this subject area. Thereafter, gaps in the literature are identified as a precursor for further investigations that will be pursued in this dissertation.

Origins of Discourses around IPR in Trade

The concept of protecting intellectual property is premised on monetising knowledge and has a long history in academic research[21]. Firstly, this paper considers literature that draws a link between intellectual property and the global economy – which together is understood as an aspect of the knowledge economy. The concept of a knowledge-based economy suggests that research and innovation are vital prerequisites for achieving and maintaining global economic competitiveness and sustained economic growth[22]. Authors like Granstrand [23] and Ford [24] use theoretical understandings in market economics as a basis of their understanding of the commercialisation of knowledge. They argue that the sale of knowledge is similar to the sale of observable, tangible goods and services, and as such intangible knowledge can be exchanged between companies or countries.

Moreover, several scholars have indulged in conceptual debates for numerous years on what exactly trade-related aspects of intellectual property entails, and how the IP-trade linkage affects different countries. Ultimately the prevailing standard considers trade-related aspects of intellectual property to be the safeguarding against the trade of counterfeit goods as well as obliging domestic IP protection for all members of the WTO according to the standards agreed

[21] John O Mugabe, *Science, technology and innovation in Africa's regional integration: From rhetoric to practice.* , (africaportal.org, 2011),18-23.
[22] John O Mugabe, *Science, technology and innovation in Africa's regional integration: From rhetoric to practice.* , (africaportal.org, 2011),18-23.
[23] Granstrand, *The economics and management of intellectual property: Towards intellectual capitalism.* (Cheltenham, Northampton: Edward Elgar, 2000).
[24] Ford, *The management and marketing of technology,* (London: JAI Press, 1985)

upon at the Uruguay Rounds which were concluded in 1994 and came into force the following year in 1995.[25] The IP negotiations at the Uruguay Rounds essentially set the precedent of later trade agreements. The precedent was that when discussing trade matters, intellectual property matters simultaneously need to be negotiated as well. One of the outcomes of the TRIPS agreement in the late 1990s and 2000s was the incorporation of IP in bilateral and multilateral trade agreements.[26] Many of these agreements extended or reaffirmed their commitment to existing TRIPS policy while others opted to rewrite completely new standards that are sometimes stricter than the TRIPS policy.

Authors like Peter Drahos are sceptical about the global linkage of IP to trade. Drahos believes that the idea of protecting intellectual property in TRIPS was part of a much broader sinister agenda.[27] This agenda had been laid out by the Organization for Economic Co-operation and Development (OECD) in the 1960s and the early 1970s in which ideas of transforming the world economy were thought about and written about. Drahos argues that free-trade negotiations fail citizens because the role of free-trade agreements is to expand the Eurocentric empire of intellectual property.[28] The idea behind this IP expansion was to free the world in terms of capital investment so that capital could be moved around the world freely and obtain the most favourable circumstances as possible.[29] The problem with this is that it requires much regulation to be removed in order for that to happen. This is because not all countries across the world are equally wealthy.[30] For example, some countries regulate the prices of patents. This is something that the pharmaceutical industry was extremely opposed to because the effect was that the price of medicines increased – instead unregulated patent prices were more favourable to developing countries.[31] With the idea of capital moving freely throughout the world without any restrictions, the implication for national sovereignty is quite significant.

---

[25] Carlos A Primo Braga, Carsten Fink, and Claudia Paz Sepulveda, *How Stronger Protection of Intellectual Property Rights Affects International Trade Flows'. In C. Fink and E. Mansfield (eds*), *Intellectual Property and Development: Lessons from Recent Economic Research*, (World Bank/Oxford University Press, 2004), 19-40.
[26] Ibid.
[27] Peter Drahos, *A philosophy of intellectual property*, (Routledge, 2016), 23.
[28] Ibid.
[29] Ibid.
[30] Ibid.
[31] Granstrand, *The economics and management of intellectual property: Towards intellectual capitalism.* (Cheltenham, Northampton: Edward Elgar, 2000).

The case for IPR in Trade

Next, this review considers literature that is in favour of stronger IPR. Authors like Maskus and Penubarti[32] and Smith[33] argue that strong IPR's have a positive impact on trade. The crux of this view is that strong IPR's provide an incentive for enterprises to trade in foreign markets with the assurance that their assets will not be stolen or imitated. In this way, IPR's are perceived as an instrument for market expansion. The view of IPR as a tool to facilitate trade is shared by authors like Primo Braga and Fink.[34] They make a case for the international harmonization of IPR in order to decrease the costs of transactions during trade. The understanding behind this is that it is more expensive for developed countries to prevent imitation of products in developing countries.[35] Thus, if those countries already had IP protection systems in place that align to the international IPR standards, the relevant local enforcement mechanisms would punish infringers of IPR in developing countries so that developed countries do not have to.

Additionally, there are studies that provide empirical data of how strong IPR have a positive impact on trade. A study conducted by Rafiquzzaman[36] in 1990 used aggregate trade data from 76 countries to assess the relationship between export and IPR. Rafiquzzaman found that regardless of the level of development, strong IPRs yield increased exports.[37] Supporting this argument, findings from a study conducted by Park and Lippold[38] dispel any ideas that IPR increase import rates rather than export rates in developing countries due to the monopoly of certain products by foreign enterprises. Park and Lippold[39] found that the implementation of stronger IPR in developing countries played an insignificant role in import rates. Park and Lippold[40] also found that strong patent rights play an extremely important role in promoting the exports of

[32] Keith E Maskus and Mohan Penubarti, *How trade-related are intellectual property rights?*. (Journal of International economics, 1995), 227-248.
[33] Pamela J Smith, *How do foreign patent rights affect US exports, affiliate sales, and licenses?*. (Journal of International Economics, 2001), 411-439.
[34] Carlos A. Primo Braga, and Carsten Fink, *The Economic Justification for the Grant of Intellectuall Property Rights: Patterns of Convergence and Conflict*.(Chi.-Kent L. Rev, 1996), 439.
[35] Ibid.
[36] Mohammed Rafiquzzaman, *The impact of patent rights on international trade: Evidence from Canada*, (Canadian Journal of Economics, 2002), 307-330.
[37] Ibid.
[38] Walter G Park and Douglas Lippoldt, *The impact of trade-related intellectual property rights on trade and foreign direct investment in developing countries*, (OECD, 2003).
[39] Ibid.
[40] Ibid.

pharmaceutical drugs, textiles and industrial chemicals. Without patent rights, sales in these industries were significantly lower.

Moreover, several authors refer to the economic and social welfare benefits of a strong IPR regime – namely Cardoso [41]; Gullec [42]; and Zagame [43]. They reflect on how the development of IP protection has also found its way into government policy across the world. Guellec argues that the capacity of a country or region to innovate depends upon a strong public research and development (R&D) sector and that universities are the main source of public sector research and development.[44] This suggests that there is a need to make sure that public policy corresponds to university policy in order to maximise the benefits from the human capital that universities provide. Markman expands on this as he believes that commercialization of knowledge depends greatly on the relationship between universities and industry.[45] This concept is also shared by Kornfield who makes the argument that knowledge commercialization will only occur when there is a mutually beneficial agreement between the inventor and industry.[46] This suggests that there is a need to incentivize such partnerships with either tax deductions or research and development contracts as a way of encouraging collaboration. A key incentive for inventors is the protection of their ideas - Rasmussen and Rice make note of the emergence of patents and licencing agreements for university research in the 1990s as a major driver of knowledge commercialization.[47]

---

[41] Cardoso, Andreia, and Aurora AC Teixeira, *Returns on R&D investment: A comprehensive survey on the magnitude and evaluation methodologies*. (Institute for Systems and Computer Engineering of Porto, Innovation and Technology Transfer Unit, Working Paper, 2009). See also. Dominique Guellec and Bruno Van Pottelsberghe De La Potterie, *The impact of public R&D expenditure on business R&D*. (Economics of innovation and new technology, 2003): 225-243. See also. Paul Zagame, *The costs of a non-innovative Europe: What can we learn and what can we expect from the simulation works*. (DEMETER project 27, 2010), 7.

[42] Dominique Guellec, and Bruno Van Pottelsberghe De La Potterie. *The impact of public R&D expenditure on business R&D.* (Economics of innovation and new technology, 2003), 225-243.

[43] Paul Zagame, *The Costs of a Non-Innovative Europe: What Can We Learn and What Can We Expect from the Simulation Works.* (Demeter Project, 2010), 7.

[44] Dominique Guellec, and Bruno Van Pottelsberghe De La Potterie. *The impact of public R&D expenditure on business R&D.* (Economics of innovation and new technology, 2003), 225-243.

[45] Gideon Markman, Peter Gianiodis, and Philip Phan, *An agency theoretic study of the relationship between knowledge agents and university technology transfer offices.* (*IEEE Trans. Eng. Manag*, 2006), 29-36.

[46] Kornfield, *Optimization of the technology transfer process between universities and companies of the private sector in relation to the incentive problem.* (Aarhus University, 2011), 2.

[47] Einar Rasmussen and Mark P. Rice, *A framework for government support mechanisms aimed at enhancing university technology transfer: the Norwegian case.* (International Journal of Technology Transferand Commercialisation, 2012), 1.

Additionally, a common theme in the literature on protecting intellectual property for knowledge commercialization is technology transfer. The concept of knowledge commercialization has been explored in the field of technology management in the 1970s by Ford.[48] Ford presented methods of marketing technology for capital gain. This line of thinking was shared by Brockhoff who views knowledge as a means to an end.[49] Brockoff articulates in his work the process of acquisition, accumulation and exploitation of knowledge. This work reveals the importance of collaboration between the multiple firms involved in knowledge commercialization.[50] These scholars argue that various states incorporate intellectual property rights in their trade policy as a means to promote creativity and innovation but also to attract foreign direct investment that is technology-intensive.

The case Against IPR in Trade

The literature discussed above has provided evidence from studies that make a case for implementing strong IPR's - arguing that it yields favourable outcomes in trade. However, there is a point of departure in the body of literature on the IP-trade linkage that makes a case against strong IPR protection. The argument is that strong IPR creates asymmetries in market power between rich and poor countries.[51] The concept of market power in this sense enables enterprises to hold a monopoly over ideas and products over a period of time – inevitably preventing bilateral exchange or fair competition from similar but perhaps cheaper products.[52] In this way, IPR becomes a barrier to legitimate trade - characterised by restrictions on the quantity that can be sold at a time or increasing prices per unit of a product.[53] There are several factors that inform the capacity of enterprises to dominate markets in this way. According to Smith[54], enterprises are able to best assert their market dominance in sectors where there are few alternatives to similar products and when there is difficulty in imitating the product through reverse engineering due to a lack of technical know-how. A further argument against IPR's in trade suggests that enterprises may opt to share their intellectual assets by grants on licencing for which they receive royalty payments or

[48] David Ford and Chris Ryan, *The marketing of technology.* (European Journal of Marketing 1977), 369-382.
[49] Klaus Brockhoff, Klaus, *Research and Development: Planning and Control*. (Walter de Gruyter, 2010).
[50] Ibid.
[51] Emmanuel Hassen, Ohid Yaqub, and Stephanie Diepeveen, *Intellectual property and developing countries: a review of the literature*, (Rand, 2010), 40.
[52] Ibid.
[53] Ibid.
[54] Pamela J Smith, *How do foreign patent rights affect US exports, affiliate sales, and licenses?*. (Journal of International Economics, 2001), 411-439.

through foreign direct investment rather than through trade.[55] In this way, IP protection affects trade flows negatively.

The above studies represent informed academic rationalizing of the impact of international IPR on developing countries. There is however very limited empirical research to prove these ideas. Nevertheless, a small amount of empirical research on this topic can still provide insight into the effects of international IP harmonization from a developing country perspective. For example, Liu and Lin[56] investigated the IP-trade relationship in developing countries that have become newly-industrialized. Their findings revealed that strong IPRs only have a positive impact on trade flows if the developing country has a strong research and development capacity.[57] This suggests that such countries would be able to skilfully imitate IP assets through reverse engineering while staying within the legal margins of IP rules. A point of agreement was found in a later empirical study by Yang and Huang[58] that confirmed these findings.

Moreover, there are some authors who argue that international IPR harmonization has created an obstacle for intra-regional trade in developing countries. For example, Smith and Correa[59] investigated the relationship between IPR administered by the TRIPS agreement and trade outputs in the pharmaceutical sector of developing countries. Their finding was that TRIPS resulted in increased pharmaceutical trade amongst developed and developing countries; the same was not true between developing countries.[60] This line of argument is corroborated by econometric research done by Park and Lippoldt[61]. The study investigates whether IPR's affect countries differently based on their levels of development. It was found that patent protection in developed countries does yield increased exports, in developing countries, patent protection moderately

[55] Carlos A Primo Braga, Carsten Fink, and Claudia Paz Sepulveda, *How Stronger Protection of Intellectual Property Rights Affects International Trade,* (World Bank/Oxford University Press, 2004), 19-40.
[56] Wen-Hsien Liu and Ya-Chi Lin, *Foreign patent rights and high-tech exports: evidence from Taiwan, (*Applied Economics, 2005), 1543-1555.
[57] Ibid.
[58] Chih-Hai Yang and Yi-Ju Huang, *Do intellectual property rights matter to Taiwan's exports? A dynamic panel approach*, (Pacific Economic Review, 2009), 555-578.
[59] Richard D Smith, Carlos Correa, and Cecilia Oh, *Trade, TRIPS, and pharmaceuticals*, (The Lancet, 2009), 684-691.
[60] Ibid.
[61] Walter G Park and Douglas Lippoldt, *The impact of trade-related intellectual property rights on trade and foreign direct investment in developing countries*, (OECD, 2003).

hindered trade in pharmaceutical drugs and computer devices, however, in the least developed countries the implementation of patent rights greatly hindered trade in all sectors.[62]

Gaps in the Literature

Thus, this literature review has revealed extensive literature written about knowledge being a significant driver of economic growth and how the international recognition of this fact led to the IP-trade linkage. However, there are limited explanations about the power dynamics involved in international IP mainstreaming in trade agreements, particularly from a regional perspective that become a driving force for IPR harmonization. Thus, in order to bridge the gap in the literature, this study will investigate the driving forces behind the accession of IPR in developing countries particularly in the SADC REC while also considering reasons for their inability to resist such forces. Given articulations from African governments stipulating ambitions to transition from labour intensive, natural resource economies towards more knowledge-based economies, the need to understand the processes of monetizing knowledge in an African context has become more pronounced. These are the motivating factors and the basis of the study.

[62] Walter G Park and Douglas Lippoldt, *The impact of trade-related intellectual property rights on trade and foreign direct investment in developing countries*, (OECD, 2003).

UNDERSTANDING THE CONCEPT OF INTELLECTUAL PROPERTY RIGHTS

Since intellectual property is a relatively technical area, it is important to break down its constituent parts in a way that is understandable to laymen. Intellectual property refers to anything that is a creation of the mind.[63] However not all ideas are automatically considered intellectual property, rather intellectual property are ideas that are given a commercial value. In many instances, the majority of the value of a company lies in their IP. For example, the cooldrink company *Coca Cola* as of 4 January 2019, was reported to have a net worth of 198.96 billion US Dollars - this is what the company is worth. However, the current assets value on their balance sheet which was last updated (at the time this paper was written) in the third quarter of 2018 is 33,41 billion US Dollars.[64] That means the company is worth 165.55 billion US Dollars more than what they paid for it.[65] This difference is accounted for by the intellectual property of the company - the branding, the unique recipe, the trade secrets etc. In other words, the *Coca Cola* IP is what makes it a successful brand and ultimately what gives it its value. The different types of innovative creations warrant a different type of intellectual property protection. Five different types of IP are described below, namely, patents, copyrights, trademarks, trade secrets and unfair competition. Although there are several others, these are the types of IP that are most relevant to the study.

Patents

A patent is a legal grant from the government of a country that gives the owner of an invention the right to prevent others from using or imitating their product or idea[66]. These could be in the form of machines, designs from a manufacturer, methods of processes or chemical compositions. The two types of patents are known as utility patents and design patents. A utility patent protects information on the way that the device works while a design patent protects the way that a product looks.[67] Generally the term for which a patent is valid is 20 years from the date of registration.[68]

---

[63] Christine Greenhalgh and Mark Rogers, *Innovation, intellectual property, and economic growth*. (Princeton University Press, 2010), 20.
[64] GlobeNewswire, *Coca-Cola Consolidated, Inc. Announces First Quarter Dividend.* Nasdaq: https://www.nasdaq.com/press-release/cocacola-consolidated-inc-announces-first-quarter-dividend-20190111-00579. (11 January, 2019)
[65] Ibid.
[66] Edmund. W Kitch., *The nature and function of the patent system.* (The Journal of Law and Economics, 1977), 269.
[67] Edmund. W Kitch, *The nature and function of the patent system.* (The Journal of Law and Economics, 1977), 269.
[68] Ibid, 266.

Moreover, there are specific treaties that oversee patents, these include - in order of establishment: The Paris Convention for the Protection of Industrial Property (1883), the Patent Cooperation Treaty (1970), the Strasbourg Agreement Concerning the International Patent Classification (1971), the Harare Protocol on Patents and Designs (1982), the WTO TRIPS Agreement (1994) and lastly the Patent Law Treaty (2000).

Copyright

A copyright is a form of protection for works of authorship or expressions of art or literature. They can include books, articles, architectural works, drawings and paintings.[69] The emergence of content creators on the internet, file sharing and social media platforms have made it increasingly difficult to protect copyright. However, creators can be compensated for the re-use of their work through royalty payments or original creator recognition on the re-created piece of work. The duration of copyright lasts for the lifetime of the author or creator plus an additional 70 years.[70]

The specific treaty documents that protect copyrights are as follows: the Berne Convention for the Protection of Literary and Artistic Works (1866), the Brussels Convention Relating to the Distribution of Program-Carrying Signals Transmitted by Satellite (1974), the Convention for the Protection of Producers of Phonograms against Unauthorized Duplication of their Phonograms (1971), the WIPO Copyright Treaty (1996) and the WIPO Performance and Phonograms Treaty (1996).

Trade Marks

They can consist of a word, a symbol or a name. Trademarks are used to indicate the source of a product so that it is distinguishable from other products.[71] A trade mark allows a user to know where the product comes from. The time frame for holding a trade mark is indefinite - it lasts for as long as the product is in use by the owning company or institution. However, the owner of the trade mark is required to renew their licence after a specific period of time - 7 years according to the WTO TRIPS Agreement.

---

[69] World Intellectual Property Organization, *What Is Intellectual Property?* (World Intellectual Property Organization, 2016). 18.
[70] Ibid., 19
[71] Ben Sihanya, Intellectual Property Rights in Kenya: Combating Counterfeit Trade in Kenya. (Konrand Stiftung Nairobi, 2010), 229.

The following are treaties for trademarks: the Madrid Agreement and Protocol Concerning the International Classification (1891 as well as 1989), the Nice Agreement Concerning the International Classification of Goods and Services for Purposes of the Registration of Marks (1957), the Singapore Treaty on the Law of Trade Marks (2006), the Banjul Protocol on Marks (1993), Trade Mark Law Treaty (1994) and lastly the Vienna Agreement Establishing an International Classification of the Figurative Elements of Marks (1973).

Trade Secrets

Trade secrets refer to pieces of information that hold commercial value because they are not easily accessible in the public domain[72]. These confidential pieces of information can include trading client lists, names of suppliers, locations of manufacturers, methods of manufacturing or even recipes. The recipe for *Coca Cola* for example is a trade secret that has been kept for over 100 years and made Coca Cola a multi-billion-dollar company. A trade secret lasts for as long as the information remains unknown or inaccessible by outside parties. There are no specific treaties protecting trade secrets thus the responsibility lies on the owner to protect the information. However, if trade secrets are stolen, it would be considered an act of unfair competition[73].

Unfair Competition

Unfair competition refers to the breach of honest practice in industrial matters and fairness in trade[74]. Although competition is an important part of market economics, any malicious intention to unfairly gain a competitive advantage is frowned upon. This could be in the form of spreading misleading pieces of information in an attempt to tarnish the public opinion and overall reputation of a competitor or the use of counterfeit products in an attempt to imitate a product and profit from it.

Protection from unfair competition is mostly administered through country-specific trade laws as well as the following policy documents: The Brussels Diplomatic Conference for the Revision of

[72] World Intellectual Property Organisation, *What is a trade secret?* (https://www.wipo.int/sme/en/ip_business/trade_secrets/trade_secrets.htm , Accessed 15 December 2018)
[73] Ibid.
[74] World Intellectual Property Organisation, *Unfair Competition*, (https://www.wipo.int/.../en/wipo.../wipo_kipo_kipa_ip_ge_08_www_109885.ppt Accessed 15 December 2018)

the Paris Convention in Article 10 (1990) and it is also reinforced by the TRIPS agreement which obliges member states to abide by the Paris Convention.

Conclusion

In conclusion, chapter one has introduced the origins of international debates about intellectual property as a new generation issue in international trade. It is revealed that intellectual property came to the forefront of international trade after the establishment of the Trade-Related Aspects of Intellectual Property Agreement which is administered by the World Trade Organization. Chapter one has also articulated the research problem, the research questions, objectives and the methods used in this study. The literature review has assessed the work of existing published authors and deduced a set of gaps in the literature that will be addressed in order to fulfil the objectives of this study. This has helped to specify the set research questions.

CHAPTER 2

HISTORY OF IPR ON THE AFRICAN CONTINENT

Introduction

Intellectual property is a component of international trade that has received widespread opposition from developing countries. The basis of this opposition is that intellectual property rights are not applicable to the realities of poor nations. This chapter provides a discussion of the different approaches to IPR on the African continent throughout history. It is necessary to briefly acknowledge historical contexts in order to gauge where present-day circumstances stem from. In this paper, the analysis of African IPR is divided into four distinctive time periods. The period between 1883 and 1935 describes how African countries navigated intellectual property rights during colonial times. The period between 1936 and 1965 describes how IPR became a neo-colonial tool to maintain African presence in the international arena. Thereafter, the period between 1966 and 1995 is characterised by efforts to limit the bargaining power of African nations in international IP and trade norm-setting. Lastly the period between 1996 to 2018 reveal efforts by African countries to resist the prevailing IPR harmonization agenda by paving their own way in IPR. These efforts are however met with international pressures that end up undermining the ability of African nations to assert their IPR-related needs. This historical timeline will be helpful in understanding some of the prevailing power dynamics that persist in the present day.

1883 – 1935: IPR as an instrument of Colonialism

At the start of African colonialism in the 1880's - what became known as the "Scramble for Africa", European countries divided the African continent with the intention to control African markets. At this time, an international IP organization was established by Britain, France, Italy, Germany, Spain and Belgium. They designed IP treaties that inevitably became instruments to the domination of African economies particularly in industrial and creative sectors.[75] The importance

[75] Alexander Peukert, *The Colonial Legacy of the International Copyright System', forthcoming in: Mamadou Diawara and Ute Röschenthaler (eds), Staging the Immaterial. Rights, Style and Performance in Sub-Saharan Africa,* (Oxford, Sean Kingston, 2012), 40.

of intellectual property was first recognized in the Paris Convention for the Protection of Industrial Property in 1883[76] and the Berne Convention for the Protection of Literary and Artistic Works in 1886[77]. The Paris Convention was formed with the aim of protecting the intellectual property of a creator when they travelled to foreign countries - particularly patents for industrial innovations and trademarks. The Berne Convention was established with the aim of having a common international framework for protecting literary and artistic works. It provides protection for IP that falls under the category of copyrights including poems, short stories, novels, plays, songs, musicals, operas, drawings, paintings, architectural works and sculptures. Thereafter, the Madrid Protocol or Madrid Agreement Concerning the International Registration of Marks came into force in 1891. At the time the Madrid Protocol provided protection for trademarks as well as protection from the sale of counterfeit goods. The Madrid Protocol was later revised to provide an alternative avenue for IP registrations – other than country-specific national applications, allowing for an international IP registration process.[78] These were the very first IP treaties created by European countries and eventually became the prevailing international IP documents accepted by countries across the world.

Even though African countries were completely left out of the formation process of these treaties, they were still forced to ratify them by way of decisions taken by colonial powers. This meant that African countries involuntarily formed IP policies that were designed to protect discoveries made by foreigners on African land – formalizing the extraction of African natural resources, plant varieties and cultural artefacts without any compensation. Even when African people made their own new creations, they experienced some obstacles when trying to monetize it[79]. Some colonial powers like Germany completely took a hard-line approach and prohibited IPR protection for native African creators – referred to as "eingeborne".[80] Other colonial powers like Great Britain allowed native African creators to protect their creations however African colonies were unable to

[76] United International Bureaux for the Protection of Intellectual Property (BIRPI), *Paris Convention for the Protection of Industrial Property,* (Geneva, 1883).
[77] United International Bureaux for the Protection of Intellectual Property (BIRPI), Berne Convention for the Protection of Literary and Artistic Works, (Geneva, 1886)
[78] World Intellectual Property Organization (WIPO), Madrid Agreement Concerning the International Registration of Marks, (Stockholm, 1891).
[79] Adebambo Adewopo, *The Global Intellectual Property System and Sub-Saharan Africa-A Prognostic Reflection.* (Hein Online, 2001), 749.
[80] Alexander Peukert, *The Colonial Legacy of the International Copyright System*, (Oxford, Sean Kingston, 2012), 41.

approve patents according to their own African standard under colonialism. Rather, patent applications from British colonies would be examined and approved in Britain and thereafter be registered in African countries.[81] For this reason, African countries were not able to develop the capacity to grant patents at a local level, and there was also no incentive to create any examination offices. This IPR domination was formalized in Article 19 of the 1886 version of the Berne convention and similarly in the Paris and Madrid Agreements in 1934. These provisions were used by all colonial powers to impose IPR on African countries in order to capitalize on discoveries found in or inspired by Africa.[82] It is in this way that IPR was used as an instrument for colonialism on the African continent.

1936 – 1965: IPR as a Neo-Colonial Reaction to Independence

The period of African decolonization prompted fears from the Bureaux Internationaux Réunis pour la Protection de la Propriété Intellectuelle (BIRPI), the prevailing international IP institution at the time – known as WIPO in the present day, that African countries would depart from the international IP system. This is because of the rise of African nationalism that exposed the unfair nature of such institutions that do not represent African people.[83] Also, there was a widely accepted view amongst developing countries that weak IPR regimes are more beneficial to their needs.[84] As a response, BIRPI along with other transnational organization in the 1960s, held forums in newly independent African countries to promote the economic benefits of being aligned to the international IP system.[85] These forums seemed to be successful because soon after gaining independence, attempts were made by African nations to maintain the global IP standard - what commentators like Rahmatian regard as a form of neo-colonialism.[86] This is evident by the fact that intellectual property policy and structures established by their colonizers were simply

[81] Andreas Rahmatian, *Neo Colonial Aspects of Global Intellectual Property Protection*. (The Journal of World Intellectual Property, 2009), 40-74.
[82] Georg Hendrik Christiaan Bodenhausen, *Guide to the Application of the Paris Convention for the Protection of Industrial Property, (*Wipo, 1968), 19.
[83] Alexander Peukert, *The Colonial Legacy of the International Copyright System*, (Oxford, Sean Kingston, 2012), 45.
[84] Ibid.
[85] Ibid.
[86] Andreas Rahmatian, *Neo Colonial Aspects of Global Intellectual Property Protection*. (The Journal of World Intellectual Property, 2009), 40-74.

continued and incorporated into national development plans without being calibrated to African principals.

By the 1950s and 1960s, several international treaties had already been established adding onto the Paris and Berne Conventions as well as the Madrid Agreements that existed during the colonial era. These include The Universal Copyright Convention of 1952 as well as the Rome Convention for the Protection of Performers, Producers and Broadcasting Organization of 1961. These treaties required signatories to make legally binding commitments – most notably requiring full protection for the proprietary rights of foreign works in Africa. Essentially, following from the colonial history described above, there seemed to be remnants of the IPR systems that existed during colonialism that persisted in the post-colonial period. However, membership obligations to international treaties seemed to replace former colonizers. Similarities are characterised by the absence of patent examination offices in African countries where the patent examination is often outsourced.[87] This means that African inventions are judged according to a standard that is not sensitive to African realities. Such IP standards were established to protect the inventions of more industrialised countries. Thus, the African post-colonial period can be regarded as a continuation of imposed international IPR standards that are not suited to African realities.

1966 – 1995: Attempts to exclude Africa from Global IP Norm-Setting

Subsequently, towards the late 1960s, developing countries lobbied for the incorporation of IPR standards that are more reflective of their realities in the international IP system at the BIRPI negotiation rounds for revisions to the Berne and Paris Conventions – a way of opening up the system to former colonies.[88] Accordingly, after negotiations, developing countries successfully secured a less stringent IPR framework for developing countries called the Protocol Regarding Developing Countries.[89] However, this concession was short lived because, at the next round of the BIRPI revision negotiations in 1971, developed countries objected to the previously accepted

[87] Michael J Finger and Philip Schuler, *Poor people's knowledge: promoting intellectual property in developing countries*. (The World Bank, 2004).
[88] Alexander Peukert, *The Colonial Legacy of the International Copyright System*, (Oxford, Sean Kingston, 2012), 46.
[89] Sam Ricketson, 'The Berne Convention for the Protection of Literary and Artistic Works: 1886– 1986, (London: Kluwer Centre for Commercial Law Studies, 1987). pp. 799-806.

concessions.[90] As a result, revisions were made to reverse the concessions made that would make IP protection more lenient for developing countries.[91] This represents an effort to limit the advancement of developing countries in the space of IPR.

At this time BIRPI became replaced by WIPO – which received the highest number of African signatories than any other international treaty in the space of IPR with 43-member states signed almost immediately.[92] WIPO was a precursor to the eventual establishment of the WTO and their IP-related TRIPS agreement. In the lead up to TRIPS, WIPO facilitated the formation of 26 new IP-related treaties, 13 of which were signed voluntarily by African countries despite having no input in the details of these treaties.[93] Less than 8 of the 43 African member states of WIPO were present at the negotiation processes of these treaties.[94] Despite administering treaties for which developing countries had minimal input, WIPO can still partly be seen as an inclusionary force because it provided a platform for developing countries to voice their concerns during international IP forums. As a result of discussions from such forums, regional arrangements on the African continent were formed with the aim of advancing systems for IP protection in Africa. The first two regional IP bodies worth mentioning are split between anglophone and francophone countries who are members to one of two regional IP bodies; either the African Regional Intellectual Property Organization (ARIPO) or the Organization Africaine de la Propriété Intellectuelle (OAPI) respectively.[95] ARIPO was created in fulfilment of the Lusaka agreement of 1976 while OAPI was created in fulfilment of The Bangui Agreement of 1977. This represented a significant effort by African countries to contribute to the international IPR system

However, the WTO-TRIPS agreement that followed in 1995 can be described as the most comprehensive strategy to limit the influence of developing countries in IPR norm-setting. This is because TRIPS make it mandatory for all members to ratify all international IP treaties that have

[90] Ibid.
[91] Ibid.
[92] Tshimanga Kongolo, 'African Contributions in Shaping the Worldwide Intellectual Property System' (Routledge 2016), 83.
[93] Jeremy de Beer, Jeremiah Baarbé, and Caroline B. Ncube, *Evolution of Africa's Intellectual Property Treaty Ratification Landscape, (*African Journal of Information and Communication, 2018), 72.
[94] Ibid.,73.
[95] Marumo Nkomo, *Regional integration in the area of intellectual property: The case for Southern African Development Community involvement.* (Law, Democracy and Development 18, 2014), 317-333.

been formed and administered since the BIRPI era right through to the WIPO era of international IPR.[96] This has significantly undermined the ability of developing countries to sign treaties that are aligned to their developmental agenda – once again limiting developing country IPR influence. TRIPS has been particularly controversial in the public health and pharmaceutical sector in most developing nations but particularly in Africa where HIV/AIDS was killing millions of people who could not afford (ARV's) that became more expensive due to TRIPS IP protection of the pharmaceutical industry.[97] Eventually, after negotiations during the Doha Round of the TRIPS agreement, developing countries were able to exempt strict protection of essential products – representing a victory for developing nations overall. Thus, it is evident that over the years, African countries have continuously been met with attempts to limit their influence in the space of IP norm-setting.

1996-2018: Africa Paving their Own Way in IPR

Since the years leading up to 2000, African countries have quickly developed economically and now the continent hosts 6 of the 10 fastest growing economies in 2018 according to the World Bank. These include Ghana, Ethiopia, Côte d'Ivoire, Djibouti, Senegal and Tanzania.[98] For this reason the African continent presents extensive business opportunities. This economic growth has also brought IP matters to the forefront of African development agendas. Although almost all African countries are signatory to the international treaties and conventions on IP that are mentioned above, they have in the last 2 decades made efforts to collaborate on IPR policy and systems at a regional and continental level. For example, in the agriculture sector, African countries recognized the value in sharing genetic resources and traditional knowledge that could help enrich the biodiversity of local communities across the continent.[99] As a result, the Nagoya Protocol was adopted in 2010. This is an example of a truly African IPR initiative that completely serves the interest of African people. Similarly, African countries showed leadership in IP norm-setting by calling for the revision of TRIPS in 2001 in order to secure access to cheaper medication

[96] Jeremy de Beer, Jeremiah Baarbé, and Caroline B. Ncube, *Evolution of Africa's Intellectual Property Treaty Ratification Landscape, (*African Journal of Information and Communication, 2018), 73.
[97] Okechukwu T. Umahi, *Access to Medicines: the Colonial Impacts on Patent law of Nigeria*, (SSRN, 2011), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1975928.
[98] World Bank Report, 2018.
[99] Tshimanga Kongolo, *African Contributions in Shaping the Worldwide Intellectual Property System*, (Routledge 2013), 83.

– initiated by Zimbabwe. This led to the successful implementation of the Doha Declaration that was mentioned above.[100] Moreover, the African Union have also made some efforts to coordinate a continental intellectual property regime.[101] However, there seems to be some difficulty and reluctance in this regard - exemplified by the struggle to mainstream the Pan-African Intellectual Property Organization (PAIPO) and the Continental Free Trade Area (CFTA) where intellectual property has been a contentious area of negotiation.

Nevertheless, the African continent is also paving their own way in advancing systems of IP protection by including IPRs in African regional economic communities (REC's) – this is the main focus of the study. Although there are several REC's on the African continent – eight in total, only some of them have included IPR's in their regional policy documents. COMESA, the EAC and ECOWAS have successfully formed their own IP policy framework which informs their regional IP practices while SADC only relies on IP provisions found in the SADC Protocol on Trade Policy document – which will be discussed in more detail in chapter four. Other African REC's have not yet included IPR in their regional policy. This paper considers the rationale for adopting IPR in REC's whether through newly formed African frameworks or aligning to international IPR. By studying the policy documents of COMESA, the EAC and ECOWAS, two opposing approaches to IPR implementation amoungst these REC's can be identified. The first approach regards intellectual property protection as an important component of regional integration – particularly in terms of science and technology transfer.[102] The second approach regards intellectual property matters as a means of securing trade and investment deals by aligning to the international IPR system despite its adverse implications on developing countries throughout history.[103] Both rationales represent a greater appreciation of IPR in regional economic agendas. Unlike the international IP frameworks mentioned earlier, COMESA, the EAC and ECOWAS seem to have avoided strict legally binding obligations and instead opted for a softer legal approach, with no enforcement body to impose compliance. These REC's call for regional IP policy harmonization

[100] Jeremy de Beer, Jeremiah Baarbé, and Caroline B. Ncube, *Evolution of Africa's Intellectual Property Treaty Ratification Landscape, (*African Journal of Information and Communication, 2018), 70.
[101] Ibid.
[102] Caroline B Ncube, *Intellectual property policy, law and administration in Africa: Exploring continental and sub-regional co-operation*, (Routledge, 2015).
[103] Ibid.

while still encouraging and allowing free policy range for respective domestic laws of member states.

Conclusion

In conclusion, chapter two has presented a brief timeline of the history of IPR's on the African continent. The engagements of African countries with international IPR's over time have involved dynamics of colonial and neo-colonial pressures as well as efforts to limit African IPR norm-setting and eventually efforts of resistance by African countries seeking a truly African IP regime. To date, progress in African-IP systems has been made particularly with the establishment of regional IP policy documents in REC's like COMESA the EAC and ECOWAS as well as the establishment of African IP-institutions like ARIPO, OAPI and PAIPO. In the REC's mentioned in this chapter the independent IP policy frameworks and differing approaches to IPR implementation and enforcement reveal that African REC's are not passively complying to international IP standards. Rather, the approach to IPR implementation depends on how they perceive the economic implications or intended benefits of regional IPR – like enhanced regional economic integration or increased trade and investment deals. Moreover, the African IP organizations like ARIPO, OAPI and PAIPO represent an effort to depart from international IP enforcement structures like WIPO in order to forge African solutions to African problems. This approach to IP policy making and protection is a good starting point to setting IP norms that are representative of African needs – whether in the public health sector, agriculture or traditional knowledge preservation to name a few. However, these "made-in-Africa" approaches inevitably come into contact with the international pressures mentioned above and the consequences are often revealed in small nuances of IP-related policy decisions that are not always voluntary. These dynamics will be explored in more detail in the following chapter - which provides a case study analysis of the Southern African Development Community (SADC).

CHAPTER 3

CASE STUDY OF THE SOUTHERN AFRICAN DEVELOPMENT COMMUNITY

Introduction

Chapter three presents a case study of the Southern African Development Community (SADC). The case study examines whether or not specific member states implement their IPR obligations and more importantly what implementation of IPR obligations actually entails in an African-regional context. This examination will help to reveal why or why not there are discrepancies between the IP provisions of the SADC Trade Protocol, international agreements and the national IP policies of selected member states. It begins with an introduction of the SADC structure. Thereafter, the SADC Protocol on Trade policy document is studied with particular focus placed on the provisions for intellectual property rights entrenched in the document. Afterwards selected SADC states are reviewed in order to better understand how the inclusion of IP policy in the trading bloc would affect the countries differently.

IPR in the Southern African Development Community

The Southern African Development Community (SADC) is a REC that consists of 16-member states namely: Angola, Botswana, Comoros (newest member - since August 2017), Democratic Republic of Congo, Lesotho, Madagascar, Malawi Mauritius, Mozambique, Namibia, South Africa, Seychelles, Swaziland, Tanzania, Zambia and Zimbabwe. The original form of the REC was known as the Southern African Development Coordination Conference (SADCC) but collapsed in 1980. Thereafter the organization was revived in 1992 and re-named the Southern African Development Community (SADC) in fulfilment of the SADC Treaty. The SADC Treaty has a number of stated objectives for the region, which can be summarized as follows: to achieve economic growth and development, to develop common socio-economic values, and to ensure that national and regional strategies and programs are complementary.[104] The rest of these objectives can be found in Article 5 of the SADC treaty. Interestingly, although the SADC treaty recognizes

[104] Southern African Development Community, Consolidated Text of the Treaty of the Southern African Development Community, (2015) 5-7.

the importance of science, technology and innovation in achieving economic objectives, there is no reference to intellectual property – which is widely regarded as an indicator for innovation and in this time period, became an important component of international trade. The absence of IP in the SADC Treaty suggests that it was not seen as a priority to members at the time that SADC was established. It is only after the establishment of the WTO-TRIPS agreement in 1995, that SADC referred to IP in a regional policy document. IP was first introduced to SADC in 1996 in the SADC Protocol on Trade document – the provisions for IP are found in Article 24 under "Other trade related issues". However, the mere reference to IP does not indicate that IP became a priority to SADC at this time. The strategic priorities of SADC are organized into a scheduled document that details the steps for the implementation of regional integration goals to be achieved every 15 years. In the first Regional Indicative Strategic Plan (RISDP) of 2000, there is no reference to intellectual property. Thus, the inclusion of IPR in the SADC Protocol on Trade document of 1996 appears to have been driven by international pressures to incorporate IP into trade matters.

Subsequently, in the last two decades, IPRs increasingly gained prominence in SADC. In 2008, for example, the importance of IPR in the region was recognized during the SADC Ministerial meeting on Science, Technology and Innovation (STI). During this meeting, the need to protect indigenous knowledge systems (IKS) was highlighted as an important goal as well as the need to protect the proprietary rights of African creators. In the same year, the SADC Protocol on STI recognized under its stated objectives the need to: "enhance and strengthen the protection of intellectual property rights".[105] Thereafter the Revised RISDP for the period 2015-2020 also recognized IP protection as an important component in reaching the SADC regional economic objectives that are stated in the SADC treaty. Thus, it appears as though there has been a genuine prioritization of IPR in SADC in the last 20 years. As opposed to the arbitrary incorporation of IP in the 1996 Trade Protocol that did not coincide with any SADC statements that recognize the value of IPR. Based on communication from SADC either in the policy documents or IP-related meetings mentioned above, the rationale for incorporating IP in SADC regional policy now appears to stem from the recognition of IPR as a driver of innovation, research and development and overall economic competitiveness.

[105] Southern African Development Community. Science and Technology. (2008)

Based on the prioritization of IPR in SADC, despite the research evidence of the adverse implications of IPR in developing countries – discussed in the earlier chapters, this paper questions whether the consequences of harmonizing domestic, regional and global IPR's are fully acknowledged by SADC. The following discussions will reveal how SADC navigates through the multiple layers of IPR incentives and disincentives – which might provide a better understanding of why certain approaches to IPR are taken by SADC as a collective as well as by individual member states. Currently, the SADC Protocol on Trade is the most significant policy document in SADC that has made a meaningful attempt to integrate economic laws of member states including related aspects like intellectual property rights. It is for this reason that the SADC Protocol on Trade is the main point of reference for this case study although other relevant policy documents are also drawn upon.

IP Provisions in the SADC Protocol on Trade (1996)

On 1 August 1996 the SADC Protocol on Trade policy document was signed by SADC member states and came into force on 25 January 2001. The main purpose of this Protocol is to establish an integrated market for trade and services in the region in order to create new business opportunities to enhance or increase the services capacity, efficiency and overall economic competitiveness of the region.[106] The document is made up of 68 pages, 9 parts and 39 Articles. This section highlights only two provisions found in the SADC Protocol on Trade that are relevant to IP protection whether explicitly stated or alluded to. In this document, intellectual property is mentioned first in article 9 under the General Exceptions - stating that:

Subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between Member States, or a disguised restriction on intra-SADC trade, nothing in Article 7 and 8 of this Protocol shall be construed as to prevent the adoption or enforcement of any measures by a Member State:

d) necessary to protect intellectual property rights, or to prevent deceptive trade practices;[107]

[106] Moyombuya Ngubula, *The SADC protocol on trade in services: a review of the protocol in light of the GATS and other SADC protocols and what it means for trade in services in the region.* (PhD diss., University of Cape Town, 2013)

[107] Southern African Development Community, *Protocol on Trade in the Southern African Development Community*. (1996), 8.

This provision basically allows member states to deviate from their commitments to the free movement of goods across the borders of SADC member states in situations where intellectual property rights were infringed upon and as such are to be protected. This provision considers intellectual property from a territorial perspective as it grants member states the right to calibrate the use of IPR in a way that is best suited for their national interests. If the IP of a SADC member is threatened, they reserve the right to deviate from SADC regional integration commitments of free movement of goods under the SADC Trade Protocol in order to enforce their IPR at a national level. Additionally, intellectual property is then explicitly stated again in Chapter 6, Article 24 of the SADC Protocol on Trade under the Intellectual Property provision. It is the most significant and somewhat controversial provision for IP found in the SADC Protocol on Trade because instead of having an independent set of guidelines or norms specifically set out by SADC – like COMESA, the EAC or ECOWAS do, it requires that member states abide by the WTO-TRIPS Agreement. It reads as follows:

"Member states shall adopt policies and implement measures within the community in accordance with the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights."[108]

This provision suggests that the SADC approach to regional IPR is to promote consent and compliance to the international IPR system - essentially continuing IP standards that began during the period of colonialism. In order to understand why SADC has taken this approach to IPR in their regional agenda, it is necessary to discuss some of the push and pull factors that determine SADC compliance to international IPR harmonization. The "pull factors" will be described in this paper as factors that draw SADC towards accepting the international IPR harmonization agenda. Inversely, "push factors" will be used to describe factors that may encourage SADC to depart from the prevailing international IPR system and instead move towards a truly African regional IPR system.

Push and Pull Factors that Determine SADC international IPR Harmonization

Although regional integration of SADC IP policy is a process to be carried out by SADC member states, it is done in an international context. Also, since SADC has not yet been able to devise a

[108] Southern African Development Community, Consolidated Text of the Treaty of the Southern African Development Community, (2015) 5-7.

regional IP policy document, the only benchmark for the harmonization of regional IP efforts would be to test the extent to which SADC member states abide by existing international and sub-regional IP policy like the TRIPS and ARIPO agreements as well as international trade agreements that also carry IP obligations. Almost all SADC member states are signatory to international treaties, conventions or trade agreements that contain IP obligations. This paper recognizes three international entities that have a particularly prominent bearing on SADC IP policy options. The first and most influential is the WTO which has set a global standard for IP protection by administering the TRIPS agreement. The next prominent international entity that influences SADC IP policy is WIPO which offers technical and procedural assistance to members. The last influential entity that is relevant to SADC is ARIPO which allows members to file IP applications using a common criterion for licensing.

Table1 shows that there is a larger membership coverage of IP treaties administered by the WTO and by proxy, WIPO. This is because while membership to treaties are optional for ARIPO members, the IP harmonization method that the WTO-TRIPS agreement ascribes to obliges members to abide by specific international IP treaties and conventions even if they were not previously signatory to those treaties and conventions.[109] These include the Paris Convention of 1967 found in Article 2 of TRIPS, the Berne Convention of 1971 found in Article 9(1), the Rome Convention found in Article 3(1) and 14 (6) and lastly the Washington Treaty on Intellectual Property in Respect of Integrated Circuits (IPIC) of 1989 found in Article 35. The table below shows the status of the 16 SADC member states with respect to the relevant IP policies.

[109] World Trade Organization, *Agreement on Trade-Related Aspects of Intellectual Property Rights*. (Geneva Secretariat, 2015).

Table 1: Membership of Main International Treaties Amoungst SADC Member States

COUNTRY	WIPO	WTO	Paris	Berne	ARIPO	Harare	Banjul	Rome	IPIC
Angola	✓	✓	✓	-	Observer	-	-	-	-
Botswana	✓	✓	✓	✓	✓	✓	✓	-	-
Comoros	✓	Observer	✓	✓	-	-	-	-	-
DRC	✓	✓	✓	✓	-	-	-	-	-
Lesotho	✓	✓	✓	✓	✓	✓	✓	✓	-
Malawi	✓	✓	✓	✓	✓	✓	✓	-	-
Mozambique	✓	✓	✓	✓	✓	✓	-	-	-
Madagascar	✓	✓	✓	✓	-	-	-	-	-
Mauritius	✓	✓	✓	✓	Observer	-	-	-	-
Namibia	✓	✓	✓	✓	✓	✓	✓	-	-
Seychelles	✓	✓	✓	-	Observer	-	-	-	-
South Africa	✓	✓	✓	✓	Observer	✓	✓	-	-
Swaziland	✓	✓	✓	✓	✓	✓	✓	-	-
Tanzania	✓	✓	✓	✓	✓	✓	✓	-	-
Zambia	✓	✓	✓	✓	✓	✓	-	-	✓
Zimbabwe	✓	✓	✓	✓	✓	✓	✓	-	-
TOTAL	**16**	**15**	**16**	**14**	**9**	**11**	**8**	**1**	**1**

Source: Compiled by author as of February 2019.

✓ **= Signatory to the treaty**

Observer = Non-signatory states who are granted privileges to participate in events of the organization

- = Not a signatory

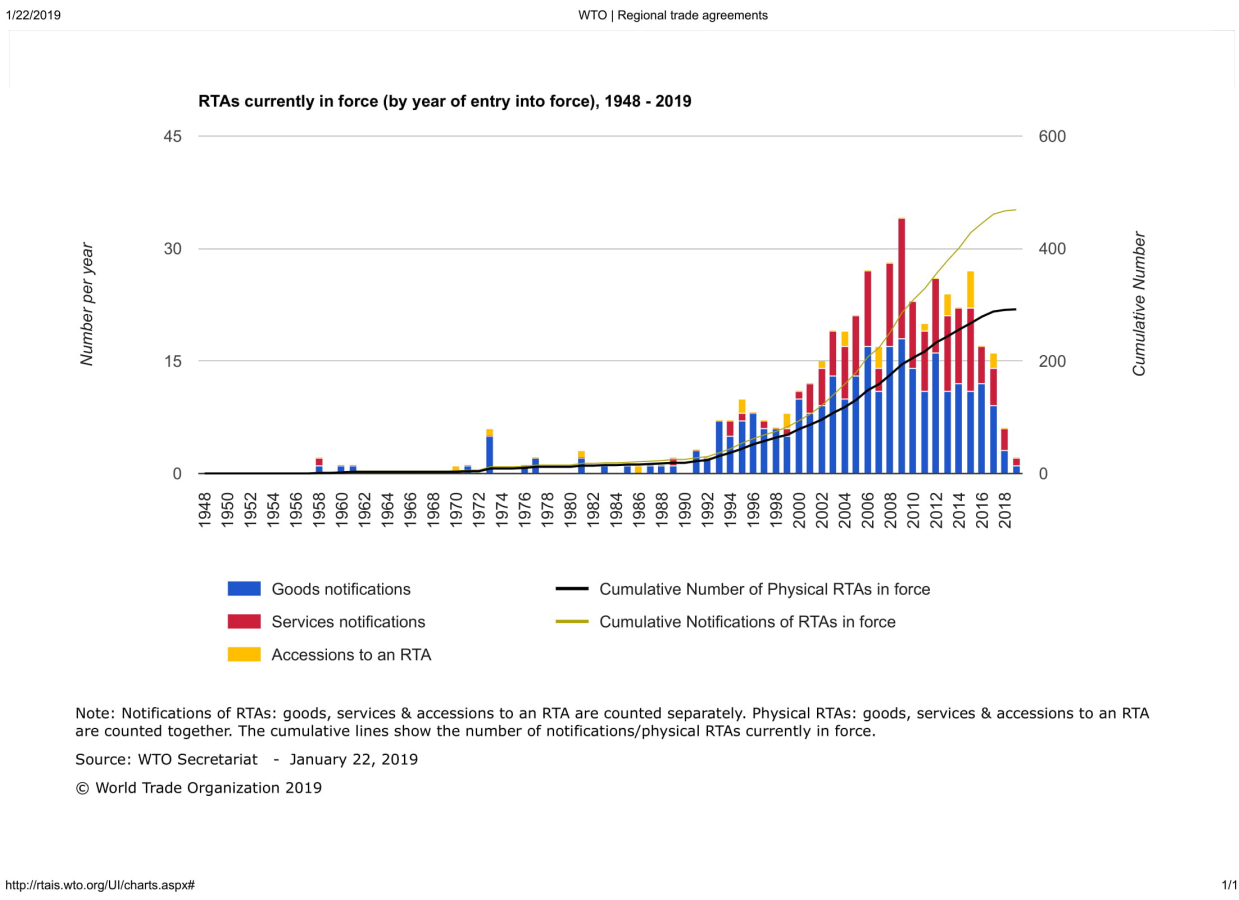
Table 1 reveals some discrepancies in the coverage of the main international treaties amongst SADC member states. The fact that there are differences in IP documents signed by different SADC members means that in some cases they might not receive reciprocal treatment. For example, since the Berne Convention - which mostly deals with copyright, has not been signed in Angola, this means that if an individual in South Africa used a protected creation from Angola and brought it back to South Africa, the original creator would not have their product protected in South Africa. The only SADC member state that is not bound by the TRIPS agreement is Comoros which only holds observer status. As such Comoros is not obliged to sign all other international treaties administered by WIPO and the WTO mentioned before, however, all other SADC member states are, since they are all WTO members – this is a pull factor towards international IPR harmonization. The table also reveals that 9 SADC member states are party to ARIPO with 4 others being observers. This suggests that even though ARIPO serves several member states, it is not entirely in a position to spearhead the SADC regional IP policy agenda. Moreover, not all SADC states have signed the Harare and Banjul Protocols (which are both administered by ARIPO) while only Lesotho is signed to the Rome Convention. For this reason, the policy documents administered by ARIPO do not exert a significant pull force towards SADC IPR harmonization.

Apart from international IP agreements, multilateral trade agreements also exert push and pull forces that contribute to international IPR harmonization and inevitably also contribute to the options that SADC has in terms of consolidating a regional IP framework. Since the establishment of the WTO in 1995, regional trade agreements and regional economic communities were created as a result of multilateral trade negotiations during the Uruguay and Doha Rounds. The main benefit of these agreements was expanded market access to sell products to more people. There is now a trend amongst countries to incorporate intellectual property rights into regional trade agreements outside of WTO agreements.[110] Regional trade agreements can offer more leeway and cooperation in regulations than WTO TRIPS agreements that are stricter and more prescriptive. However, sometimes regional trade agreements can actually impose stricter IP standards than TRIPS standards.

[110] Ermias Biadgleng and Jean-Christoph Maur, *The Influence of Preferential Trade Agreements on the Implementation of Intellectual Property Rights in Developing Countries.* (2011).

The graph below shows the evolution of regional trade agreements in the world from 1948 to 2018. It is evident that the number of regional trade agreements in the world saw a sharp increase that commenced when the TRIPS agreement was established around 1994 and 1995. Many of these RTA's have intellectual property provisions that go beyond the scope of TRIPS. Thus, the supremacy of the WTO-TRIPS agreement as the overarching norm setting body for IP matters is challenged by the emergence of RTA's.

Graph showing the increasing emergence of RTA's after the establishment of TRIPS



This paper highlights three multilateral trade agreements that have significance to the options that SADC have in forging their own IP framework while also abiding by IP obligations that were agreed on in these multilateral trade agreements. Two of these trade agreements, particularly the European Union Economic Partnership Agreement with SADC (EU-SADC EPA) and the African

Growth and Opportunity Act (AGOA) both represent trade agreements with developed countries particularly those in the European Union and United States respectively. The third multilateral agreement studied in this paper however represents an effort by the African continent to forge their own way in the space of trade and related aspects like intellectual property. This agreement is known as the African Continental Free Trade Agreement (AfCFTA). The table below represents the membership coverage of the SADC member states in the relevant trade partnerships.

Table 2: SADC States Signed to Major Trade Agreements with IP Provisions

COUNTRY	EU-SADC EPA	AGOA	AfCFTA
Angola	Option to join in future	✓	✓
Botswana	✓	✓	✓
Comoros	-	✓	✓
DRC	Negotiating	-	✓
Lesotho	✓	✓	✓
Madagascar	Negotiating	✓	✓
Malawi	Negotiating	✓	✓
Mauritius	Negotiating	✓	✓
Mozambique	✓	✓	✓
Namibia	✓	✓	✓
Seychelles	-	-	✓
South Africa	✓	✓	✓
Swaziland	✓	✓	✓
Tanzania	-	✓	✓
Zambia	Negotiating	✓	✓
Zimbabwe	Negotiating	-	✓

Source: Compiled by author as of March 2019.

The EU-SADC Economic Partnership Agreement

In the EU-SADC EPA legislation, intellectual property is addressed to a great extent in article 16 and carries several obligations. This provision is found under "Cooperation on the protection of intellectual property rights". Firstly, it reiterates the commitments made in article 46 of the Cotonou agreement which states that:

"*parties recognise the need to ensure an adequate and effective level of protection for intellectual property rights and agree on the need to accede to all relevant international conventions as referred to in part 1 of TRIPS."*[111]

Essentially all states who signed the Cotonou agreement agreed that there was a need to protect IP rights and as a starting point, the provisions for IP found in Part 1 of TRIPS should be accepted by all signatories - including all rights obligations and flexibilities. This was the prevailing agreement between African and European states preceding the EU-SADC EPA. The Cotonou Agreement is a European partnership that includes countries from the African, Caribbean and Pacific regions (ACP). Although the Cotonou agreement is not regarded in this study to have a significant impact on IP policy options in SADC, it did play an important role in the formation of the EU-SADC partnership agreement.

Accordingly, the EU-SADC EPA legislation requires members to protect IPR from infringement without discrimination using adequate enforcement mechanisms while abiding by international agreements to which they are signed to. Moreover, member states are provided with a framework for granting geographical indications (GI's)[112] - these are a type of IP that provide information on a product of which country it originates from. Currently this protocol is only applicable between the EU and South Africa. A major reason is because South Africa has a very vibrant wine industry and the many wineries around the country seek to promote their wine with acknowledgement of where they were produced. In protocol 3 of the EU-SADC agreement document, there are very specific obligations of how and which geographical indications are to be protected. Thus, given the obligations that South Africa has for GI's with the EU, it is unlikely that South Africa would agree to a regional IP framework that may undermine such commitments. Other SADC states are

[111] European Commission, *The Cotonou Agreement.* The European Union (2014).
[112] European Commission, *Economic Partnership Agreement between the European Union and its Member States of the one part and the SADC EPA States of the Other Part. Official Journal of the European Union.* (2016).

also able to join this protocol, but they are under no stringent obligation to do so. The EU-SADC EPA also provides the opportunity for member states to cooperate in the area of traditional knowledge in future.[113] Members are also permitted to consider entering negotiations for IP protection at a later date, however no specific time frame is stipulated in which this should be done.[114] Lastly in Article 112 of the EU-SADC EPA legislation under "Relations with the WTO Agreement" intellectual property protection is alluded to as it is stated that: "*The Parties agree that nothing in this Agreement requires them to act in a manner inconsistent with their WTO obligations."*[115] This means that those states who are WTO members and by proxy signatory to the TRIPS agreement, are encouraged in the EU-SADC EPA to abide by their TRIPS obligations - giving TRIPS supremacy. This is a perfect example of a pull force towards global IPR harmonization.

The African Growth and Opportunity Act (AGOA)

The African Growth and Opportunity Act (AGOA) is a part of United States legislation. It is a preferential trade agreement with sub-Saharan African countries, giving them duty free access to the US market for the sale of certain categories of goods. It was first initiated in 2000 and is now set to expire in 2025. The reason for mentioning AGOA in this study as a trade agreement that significantly impacts SADC IP policy options is because of the IP related preconditions to AGOA eligibility. In the AGOA legislation there are certain preconditions that sub-Saharan African states must meet in order to be eligible to be a member, this eligibility is decided by the President of the United States. These conditions are stipulated in Section 104 of the AGOA legislation. The specific precondition for intellectual property reads as follows:

(a) IN GENERAL.—The President is authorized to designate a sub-Saharan African country as an eligible sub-Saharan African country if the President determines that the country— (1) has established, or is making continual progress toward establishing ... (C) the elimination of barriers

[113] European Commission, *Economic Partnership Agreement between the European Union and its Member States of the one part and the SADC EPA States of the Other Part. Official Journal of the European Union.* (2016).
[114] Ibid.
[115] Ibid.

to United States trade and investment, including by ... (ii) the protection of intellectual property; [116]

Although this precondition does not require potential members to put in place any stringent IP policy like TRIPS-plus, it does nevertheless oblige potential members to put in place systems to protect IP, even if it was not a national priority for those countries. In this way, SADC countries that seek the trade benefits offered through AGOA membership may be pressured to accept these IPR's in order to secure trade deals. As such AGOA also represents a pull force towards greater international IPR harmonization.

The African Continental Free-Trade Area

In fulfilment of the Abuja Treaty mandate of 1991, negotiations for the Continental Free Trade Area (AfCFTA) started in 2012 with the purpose of integrating the continent and boosting intra-African trade. The AfCFTA represents an important milestone in the integration of the African continent. The consolidated text of the agreement has currently been signed by 44 of the 55 AU member states in Kigali, Rwanda in early 2018, the Kigali Declaration has been signed by 43 states and the Protocol on the Free Movement of Persons, Rights to Residence and Right to Establishment was signed by 27 AU member states. The CFTA invokes the spirit of pan-Africanism as it seeks to promote intra-regional African trade as well as an opportunity for African nations to assert their IP agenda in future negotiations for free trade.

Although, IP has been identified by several African heads of states as being an important area, IPR will only be addressed in phase 2 of negotiations for the AfCFTA. Although the IP provisions for the AfCFTA are yet to be finalised, the reason for listing the AfCFTA in this study is to indicate that it will be an extremely influential agreement to SADC IP policy options. As such the AfCFTA can be regarded as a push factor, providing a rationale for SADC to depart from the prevailing international IPR harmonization agenda and rather move towards an African IPR agenda. However, if the IP provisions in the AfCFTA radically depart from the international IPR system, African countries may anticipate retaliation from developed countries – exemplified by events in history mentioned in chapter two between 1966 and 1995. Thus, fear of retaliation and desires

[116] United States Government Accountability Office, *Africa Growth and Opportunity Act Eligibility Process and Economic Development in Sub-Saharan Africa*, Article 112. (2015), 3-28.

for trade and investment benefits may end up being a pull factor that reverts AfCFTA IPR towards international IPR harmonization.

However, sometimes if developing countries resist such retaliation, they can in fact assert their demands in the space of IPR to a positive end. For instance, in the late 1990's and early 2000's when South Africa chose to forego its international IP obligations in order to serve the interest of public health sectors in developing countries. In 1997 when the HIV prevalence rate in the country was at 27% and roughly 20 thousand people were dying every month of AIDS. South Africa, under the government of former President Nelson Mandela, devised a law that went against TRIPS patent standards in order to secure more affordable anti-retroviral medication (ARV's).[117] This involved making use of compulsory licenses as well as parallel importation.[118] This prompted a backlash from advocates of stringent IP protection, especially the US who makes large profits from pharmaceutical patents. They argued that South Africa should find a way to secure access to affordable medications while still catering to the IP rights of creators of the medications - a strategy similar to the way copyright is protected by way of "fair use". Thus, in 1999 as a retaliation to the South African non-compliance with TRIPS, the Office of the United States Trade Representative (USTR) placed South Africa on a "watch list" and soon after in 2001, filed a lawsuit against South Africa.[119] Eventually, this lawsuit was withdrawn – representing a significant victory for the public health sector while also asserting the ability to developing countries to resist forces from developed countries.

Nevertheless, prospects for SADC IP integration is not helped by the disintegration in the multilateral trading environment due to recent events like the withdrawal of the US from the Trans-Pacific Partnership (TPP), the withdrawal of England from the EU (Brexit) as well as the failure to form a WTO multilateral trade agreement during the Doha Round. Developed countries in each of these events exhibited protectionist stances in favour of preserving national sovereignty overall but also in the area of knowledge protection.[120] Thus there is a common denominator between

[117] Frank Solomon Sacco. *A comparative study of the implementation in Zimbabwe and South Africa of the international law rules that allow compulsory licensing and parallel importation for HIV/AIDS drugs.* (African Human Rights Law Journal 5, 2005), 105-128.
[118] Ibid.
[119] James Thuo Gathii, *The legal status of the Doha Declaration on TRIPS and public health under the Vienna Convention on the Law of Treaties*. (Harvard Journal of Law and Technology, 2001), 312.
[120] Henry Mutai, *Intellectual Property Rights Promotion and Protection under the Tripartite Free Trade Area (TFTA).* (Tralac Working Paper, 2016)

developed and developing countries - both categories are opposing the provisions for IP in trade agreements but on opposite ends of the opposition spectrum either in favour of stricter IPR or more lenient IPR. Thus, these push and pull dynamics of global IPR harmonization represent differing agendas for IPR - strict versus weak protection. SADC member states often maintain the stance that they are not equipped to adopt strict IP policy because it would hamper their developmental goals.[121] However, as portrayed throughout this chapter, TRIPS has limited the ability of SADC member states to administer their own IP system due to imposed, legally binding obligations to abide by TRIPS for all WTO members. Moreover, the consideration of TRIPS-plus regulations that are often imposed in free trade agreements like AGOA or the EU-EPA's which are still under negotiation for some countries, would further limit the capacity for SADC member states to align their IP policy to their own national interests. As a response to attempts to mainstream stricter IP protection, developing countries have been demanding IP rules that are more flexible in order to enhance their policy spaces in a way that caters to their national interests[122]. Developed countries continue to dictate the prevailing global IP agenda partly because African countries are largely left out of international IP forums and as such African regional interests are not always represented.

IMPLEMENTING IPR IN SELECTED SADC STATES

Progress and Challenges

Based on the varying coverage of membership for SADC states to international treaties and multi-lateral agreements, as mentioned earlier in the paper, it is evident that there are discrepancies in the implementation of IPR among individual member states. Although the SADC community consists of 16-member states, this section discusses only 5 of them, namely; South Africa, Botswana, Malawi, Zambia and Zimbabwe. The purpose of pinpointing these countries is not to make a generalization about SADC but rather to highlight the unique experience that each country faces when implementing IPR – to indicate that domestic policy and practice can and do impact regional commitments. This paper does however recognize that country by country assessments are particularly vulnerable to selection bias. It is for this reason that the method of controlled

[121] Marumo Nkomo, *Regional integration in the area of intellectual property* (Law, Democracy and Development 18, 2014), 317-333.
[122] Michael Finger and Philip Schuler, *Poor people's knowledge: promoting intellectual property in developing countries*. (The World Bank, 2004).

comparison, more specifically the method of agreement or most different approach is being applied. Even though each of these countries are similar in that they are located in the same region (Southern Africa) they will differ in this study in particular on the basis of economic performance.

These countries were selected based on the differences in their performance in the Global Competitiveness Index (GCI) of 2017[123] and the Global Innovation Index (GII) of 2017[124]. In the context of the African continent, South Africa ranks number two in the GCI and number one in the GII. Botswana also performs quite well in both indexes. These ratings suggest that both South Africa and Botswana are generally more economically competitive and innovative than other SADC countries and thus could provide lessons of how to strategically make use of intellectual property (which is used as a measure for innovation) to maximize the benefits of trade. Malawi, Zambia and Zimbabwe were selected because they have comparatively lower competitiveness and innovation rankings despite having intellectual property frameworks in place. Thus, it will be interesting to investigate where the shortcomings lie and how they might affect SADC regional IPR objectives. This country by country assessment will also contribute to answering the part of the research question that seeks to understand why there may or may not be discrepancies in domestic policy commitments to regional and global IPR harmonization.

Firstly, it is important to recognize that the different stages of economic development in the respective SADC member states play a significant role in the varied national legislations for IP. The reality is that SADC consists of economically stronger and weaker members. Malawi, Zambia and Zimbabwe represent three of the poorest countries in Southern Africa and thus they cannot project economic influence the way South Africa or Botswana can. Since South Africa and Botswana are comparatively economically stronger than the other states they are able to play a leadership role in SADC. Table 3 reveals the IPR ranking of the five SADC states studied in this chapter.

[123] World Economic Forum, *The Africa Competitiveness Report* (2017), 32-33.

[124] Dutta, Soumitra, Bruno Lanvin, and Sacha Wunsch-Vincent, *The global innovation index 2015.* (*Geneva: World Intellectual Property Organization*, 2015), xviii.

Table 3: International Property Rights Index (2018 Report)

IPR Ranking of Selected SADC States

COUNTRY	SCORE	GLOBAL RANK	REGIONAL RANK
Botswana	5.999	49	4
Malawi	4.660	97	13
South Africa	6.348	37	2
Zambia	4.732	92	11
Zimbabwe	3.844	117	23

Based on the IPRI 2018 report, out of 125 states surveyed, it is evident that South Africa and Botswana have the best performing IPR systems relative to the other SADC member states and perform moderately at a global level. Contrarily Malawi, Zambia and Zimbabwe performed poorly both globally and regionally. Although this information is not a reflection of the entire SADC community, something can be said about the relationship between economic performance and the status of IP policy. Particularly in terms of bargaining power. South Africa and Botswana are more present at IP forums and seem to dictate the IP policy direction for the SADC region. Malawi, on the other hand, has generally been absent from many IP forums and thus play an insignificant role in charting the SADC IP agenda.

These discrepancies in the domestic IPR of SADC member states are also complicated by differences in the national interest to certain types of IP. Since states are rational actors, it is not uncommon for a country to protect what is most valuable to it. It appears that the inconsistencies in IPR may be a result of differing perceptions of the role that IP plays in serving national interests. Depending on the economic market, political or social conditions or even the history of individual SADC member states, some types of IPR will be more relevant in some countries than in others. This creates disparities in what individual SADC member states would prioritise when applying the international and regional IPR obligations to their respective countries. South Africa has had comparatively more success in technology-related innovations, and as such, South Africa would benefit more from an IP agenda that corresponds to international patent rules.

Conversely, for a less innovative country like Malawi, there may not be an incentive to implement strict patent laws because there are far fewer patent outputs emanating from the country.[125]

Nevertheless, the statistics for the number of IP applications remains relatively low in Africa.[126] Since IPR are personal rights, the lack of registered IP licenses and appreciation for their use in Southern Africa depends upon whether creators seek IP protection or not. Thus, lack of awareness presents itself as a challenge to IPR implementation in SADC. There has also been a failure to inform people on the dangers of counterfeit and contraband products.[127] For example farmers in Lesotho and South Africa often purchase unapproved products because they are sold at extremely low prices and sometimes they end up being harmful to crops.[128] Similarly, the sale of illegal skin bleaching lotions often enters South African ports.[129]

Moreover, a broad review of the IP policy landscape in the five selected SADC member states studied here suggests that these Southern African countries are not at the same stage of IP lawmaking and policy implementation. Out of the five selected countries, South Africa and Zambia are the only countries that have a national IP policy document. South Africa has a long history of IPR protection - some of which was introduced by their former British colonizers and later revised after independence. For example, there are specific provisions in the South African Trade Marks Act and the Copyright Act that deal with civil and criminal liability when IPR are infringed upon; there is also The Counterfeit Goods Act of 1997. After the establishment of the TRIPS agreement, South Africa took the necessary steps to adhere to TRIPS obligations. Part of the adherence to TRIPS is the modification of national laws as well as institutional structures. South Africa established its own Intellectual Property Policy document, and the first phase was approved in 2018. This is the first comprehensive policy that contains provisions for all types of IP protection. In terms of implementation of the IP policy, the Inter-Ministerial Committee on Intellectual Property (IMCIP) has been formed. The Department of Science and Technology also promote the

[125] Marumo Nkomo, *Regional integration in the area of intellectual property.* (Law, Democracy and Development 18, 2014), 317-333
[126] Michael J Finger and Philip Schuler, *Poor people's knowledge: promoting intellectual property in developing countries*. (The World Bank, 2004).
[127] Marumo Nkomo, *Regional integration in the area of intellectual property.* (Law, Democracy and Development 18, 2014), 317-333

[128] Ibid.
[129] Ibid.

protection of IP through the establishment of structures like the National Intellectual Property Management Office (NIPMO). These all represent efforts from South Africa to harmonize their national IP policy with international IP policy.

Similarly, Zambia also made considerable efforts to adhere to the TRIPS obligation to modify their domestic policy. Although the first IP office in Zambia was established in 1968, Zambia did not have a national IP policy until 2010. Unfortunately, this policy document could not be found in the public domain - it is not available on Zambian government websites or on the WIPO website which usually contains policy documents for all member states. The Zambian IP policy document can only be obtained from the Ministry of Commerce, Trade and Industry (MCTI) as well as the Ministry of Information and Broadcasting where the policy is administered. Thus, any information on Zambian national IPR discussed in this study is based on accounts from people who managed to obtain a copy of the document but were unable to distribute it – in this case, Caroline Ncube. The document provides an outline of the main IP related objectives and goals for the country as well as some of the guiding principles that informed the document. There is also an implementation plan to be followed over a period of 10 years.[130] This document is a great achievement for the country and puts it on a path to attracting more investors who can be assured that if they do business in Zambia, the necessary laws are in place to protect their IP. However, even though a comprehensive IP Policy was formed in 2010, there are still certain policies that undermine efforts by Zambia to align their IP laws to IP laws elsewhere. For example, the Zambian trademark law which does not include protection of service marks presents a challenge for those seeking protection for a trademark on a business that provides a service rather than a tangible good.

Moreover, in Zambia, the Intellectual Property Policy of 2010 regards the protection of infringement of IPR as the main task for Zambian customs authority.[131] Infringement is described as "intent to defraud or to allow another to defraud". As such, counterfeiting is punishable by 5 years imprisonment.[132] This suggests that Zambian authorities take the protection of IPR seriously – much like the IP enforcement mechanism of the WTO.

[130] Caroline B Ncube, *Intellectual property policy, law and administration in Africa: Exploring continental and sub-regional co-operation*. (Routledge, 2015).
[131] Ibid.
[132] Ibid.

As opposed to South Africa, Zambia and most recently Zimbabwe who have domestic IP Policy in place – in fulfilment of their TRIPS obligations, Botswana and Malawi only have the IP laws that were transplanted from their former British colonizers. It appears as though the national IP policies of these SADC states were formed without consideration of regional similarities but were rather formed in isolation. Although Botswana was never colonized, it was a British protectorate known as Bechuanaland. Botswana has large populations of indigenous people, and in many instances, the traditions of indigenous communities affect the laws of the nation. Today, Botswana has signed various international IPR agreements but only has four domestic legal documents that address IPR. The two that directly relate to IPR include the Copyright and Neighbouring Rights Act and secondly the Industrial Property Act. The other policy documents that address IP are the Competition Policy of 2005 as well as the Research, Science, Technology and Innovation Policy (RSTI) of 2011. Malawi is currently in the process of developing its own national IP policy, and at present the country only has a draft IP policy. However, outdated policy from the colonial era persist in Malawi such as the Patent and Trademark Act of 1948 which is administered by the Registrar General - this act involves the protection for industrial property. Apart from its domestic IPR, Malawi is also a signatory to most of the main international treaties and trade agreements that carry IP-obligations. The acceptance of these IPR's in domestic and international treaties suggests that Malawi recognizes the significance of protecting IP. However, there are some challenges involved in terms of IPR enforcement - the country lacks the capacity to do so. Even with TRIPS flexibilities which are intended to make the implementation process more lenient, Malawi continues to lag behind in implementation due to limited technical, technological, institutional and financial support.

Further, much like all the member states studied here, the IPR implementation path of Zimbabwe can be traced as far back as 1967 while under British colonial rule[133]. It is worth noting that the IP policy implementation style of Zimbabwe has been characterized by the continuation of colonial policies, long delays on revisions to old policies and scarce public communication[134]. For instance, there are important aspects of the Plant Breeders Act that were last amended in 1974 - which is

[133] Adebambo Adewopo, *The Global Intellectual Property System and Sub-Saharan Africa-A Prognostic Reflection.* (Hein Online, 2001), 749.

[134] Ibid.

before Zimbabwe gained independence.[135] Then in 2000, the Copyright and Neighbouring Act was finalized but only came into force after 2002.[136] Also, in December 2014 the Inter-Ministerial Committee on Intellectual Property launched a draft national IP policy, but unfortunately this document was not made available in the public domain.[137] Therefore, the fact that IP laws were left idle for long periods of time, as well as the inaccessibility of policy, suggests that IPR was typically not a policy priority for Zimbabwe in the past.

However, in the last decade, it seems as though IP matters have increasingly come to the forefront of the Zimbabwean policy agenda. There is reason to believe that the increased attention to IPR was spurred on by deadlines to fulfil international IPR obligations.[138] This is characterised by the preamble of the current Patent bill which states that: *"The bill will amend the patent act to give effect to Zimbabwe's international obligations under the agreement on Trade-Related Aspects of Intellectual Property Rights of 1994 and the Patent Co-operation Act of 1970."*[139] This suggests that the efforts by the Zimbabwean government to revisit IPR was not an organic prioritization based on domestic need but was rather a reaction to outside forces. As a result, Zimbabwe also went on to establish a national Intellectual Property Policy Implementation Strategy in June 2018[140]. This document reveals that Zimbabwe is currently in the process of aligning to the TRIPS international IPR agenda.

Finally, in terms of the administrative aspect of IPR, the South African IP environment is the leader among the other SADC states studied in this paper. For instance, South Africa has a digital registration system while the registries in other SADC countries are paper-based which makes the system extremely time-consuming.[141] This presents a challenge in terms of keeping up with international rates of IP outputs. The registries in other SADC countries are paper based which makes the system extremely time consuming. This presents a challenge in terms of keeping up

[135] Emson F Chiwenga, *The role of IPR on maize output in Zimbabwe*. (2010).
[136] Caroline B Ncube, *Copyright Protection of Computer Programs, Computer-Generated Works and Databases in Zimbabwe. (*The Journal of Information, Law and Technology, 2002), 02-2.
[137] Caroline B Ncube, *Intellectual property policy, law and administration in Africa: Exploring continental and sub-regional co-operation.*. (Routledge, 2015).
[138] Ibid.
[139] The Zimbabwean Patents Act (Chapter 26:03)
[140] The Republic of Zimbabwe, *The Zimbabwe National Intellectual Property Policy and Implementation Strategy 2018 - 2022.* (The Ministry of Justice, Legal and Parliamentary Affairs, 2008).
[141] Marumo Nkomo, *Regional integration in the area of intellectual property: The case for Southern African Development Community involvement.* (Law, Democracy and Development 18, 2014), 317-333

with international rates of IP outputs. Although WIPO and other organizations have provided technical support, the challenge of financial barriers and human capacity persist. As a result, an application for a trade mark in South Africa could take a few months to be accepted however, for other countries the trade mark application could be in the processing stage for several years or even indefinitely. Having a common IP framework would help to avoid such discrepancies.

The link between registration time and IP output is apparent in Kenya for example where the Kenya Copyright Board partnered with the Microsoft 4Africa initiative to create an automated online system where people can register their IP from a distance. This resulted in a 100 percent increase in patent applications from June 2015 to October 2015.[142] Louis Otieno who is the Corporate Affairs Director of Microsoft 4Africa was quoted saying "Every country in Africa is committed to accelerating its economic growth and becoming globally competitive. Because we live in the information age, a critical aspect of achieving this is the monetization of IP."[143] The automation of IP registration is a way to facilitate the process of making IP profitable for Africa by making the IP application process fast, inexpensive and easily accessible from any location.

INCENTIVES AND DISINCENTIVES FOR IPR IN SADC

Are IPR's Boon or Bane?

The shift towards global IPR harmonization was promoted by developing countries through the WTO and related institutions as a significant driving force for innovation that will enhance economic growth for all countries involved. However, such perceptions gained increased opposition, especially from academics like Peter Drahos who stress that the global IP harmonization agenda is based on sinister intentions to impose systems of control and compliance on developing countries – similar to colonial structures[144]. Inspired by this controversy, this paper now considers some of the incentives and disincentives for pursuing global IPR harmonization for SADC.

[142] Microsoft, *More African countries to automate IP registration,* https://www.microsoft.com/africa/4afrika/automate-ip.aspx, (2006)
[143] Ibid
[144] Peter Drahos, *A philosophy of intellectual property*, (Routledge, 2016), 23.

Firstly, the predominant incentive for IPR as stated extensively in the policy documents studied throughout the case study, is the economic benefits of IPR in international business. In a study by the OECD, it was found that there is a positive correlation between strong patent rights and foreign direct investment (FDI) inflows.[145] Similarly another study finds that where there is a 1% increase in patent protection in a country there is a correlation of a 2.8% FDI increase, a 1% trademark protection increase correlates to 3.8% FDI and a 1% improvement in copyright protection increased FDI by 6.8%.[146] The idea behind this growth is that when a country has a strong IPR regime, foreign enterprises are more inclined to invest and trade because they would be confident that their proprietary right is protected to the fullest extent. For this reason, SADC may opt to align with the international IPR harmonization agenda in order to secure trade and investment deals.

However, even though IPR are promoted as an instrument to increase trade flows, in many instances IPR actually end up being a barrier to trade. As mentioned in Chapter 1 and 2 of this paper, the TRIPS agreement intends to articulate the IP standards for what is considered legitimate trade. The TRIPS agreement considers legitimate trade to be any trade that does not infringe on IPR and seeks to remove any IP-related impediments to trade. In theory, this is meant to facilitate free trade. However, TRIPS has actually transformed conventional free trade law which is generally based on removing barriers to trade. Instead, it has created barriers to trade by raising the standard of IP protection. For example, the rights of all types of IP, apart from copyright must apply to the principle of territoriality. This means that the protection only applies within the borders of the country that the IP license was issued but has no jurisdiction in foreign territories.[147] Copyright is the only type of IP that is universally recognized after the issuance of the initial license. Thus, in order to trade in foreign countries an IP owner would be required to register their IP in each country they will be trading with.[148] This can be extremely costly and even discourage intra-regional trade for entrepreneurs from SADC member states seeking to do business in the region. However, IP should not become a means of obstructing trade. One important TRIPS obligation is that all members are required to suppress illegitimate trade. This can cause some problems given the diversity of WTO membership because what works in the US, for example,

[145] OECD, *Foreign Direct Investment for Development.* (2002), 3-32.
[146] Allen N Dixon, *Intellectual Property: Powerhouse for Innovation and Economic Growth*. (International Chamber of Commerce, 2011).
[147] Department of Trade and Industry, *Companies and Intellectual Property Commission*. (2008).
[148] Ibid.

might not necessarily work in Malawi. Thus, although there is a multilateral IP standard for adequate trade, there is also some flexibility for LDCs to adapt in the applications of these standards - the extent to which SADC makes use of these flexibilities will be discussed below.

Considering that IPR's are private rights granted to an individual creator or firm, the scope of IPR protection from SADC and its member states can only be in the form of prevention of the importation of goods that have infringed on IPR and should be dealt with by customs authorities.[149] This is the basic obligation that all WTO member states must comply with and is accounted for in Article 51 of the TRIPS agreement as follows :

Members shall, ...adopt procedures to enable a right holder, who has valid grounds for suspecting that the importation of the counterfeit trademark or copyrighted goods may take place, to lodge an application in writing with competent authorities, administrative or judicial for the suspension by customs authorities of the release into free circulation of such goods...[150]

Since the SADC has not yet formed a customs authority, there is currently no stated policy procedure on what to do when IPR infringed products arrive at ports of member states. However, the lack of an integrated SADC customs union is made up for by the provision in Article 69 of the TRIPS Agreement where member states agree to cooperate in destroying any intellectual property rights that infringe on international trade in goods. This would require the formation of contact points in respective member states, the creation of a framework for IPR cooperation to bring a stop to the illegal trade of counterfeit and pirated products, and also the free exchange of information between customs authorities when an infringement is made to prevent further spread of IP infringed goods.[151]

However, when implementing this TRIPS provision in practice, it proves to be difficult for SADC member states to prevent imports of counterfeit products within the region or to identify where it came from since there is an absence of a common external trade practice. For example, the law firm, Spoor and Fisher, worked on a case where 600 cases of counterfeit products were found in the possession of a Zambian national. Since in Zambia counterfeiting is punishable by 5 years

[149]Southern African Development Community, *Protocol on Trade in the Southern African Development Community*. (1996), 8.
[150] Ibid.
[151] Ibid.

imprisonment, the individual was charged and convicted accordingly, and the counterfeit products were destroyed.[152] Later it was revealed that the counterfeit products had entered Zambia through Namibia, in the port of Walvis Bay. The shipment had been cleared by the Namibian authorities to be shipped to Sierra Leone. A total of 7,991 cases were eventually found due to cross-border cooperation between the legal company Spoor and Fisher and authorities of the countries where the goods were found.[153] However, the ease of entry of counterfeit goods from Namibia to Zambia is a testament to the potential consequences of not having common external trade tariffs, trade laws and a SADC customs union in order to enforce IPR protection. It is apparent that there is no consistent method of dealing with counterfeit products in the SADC region. For instance, South Africa has developed anti-counterfeiting laws and bodies. Contrarily the other SADC countries do not have specific anti-counterfeit laws or bodies but simply make use of what is available whether it is their respective customs unions, courts or IP legislation with some being stricter than others. This example reflects the difficulty in harmonising SADC IP systems to TRIPS minimum standards.

Although the lack of a SADC customs union and common standards on counterfeit and IP infringed products intensifies challenges to intra-regional trade, the REC has had better coordination in the health trading sector. The SADC has managed to use their TRIPS flexibilities by creating a Pharmaceutical Business Plan to coordinate the use of TRIPS flexibilities which all SADC member states are eligible for due to their developing country status.[154] This is intended to provide access to affordable medications by granting compulsory licenses. A compulsory licence allows generic firms to patent a product that has already been patented without seeking consent from the creator. SADC has fully incorporated Trips flexibilities in the pharmaceutical sector in order to produce medicines regionally to secure access to affordable medication for citizens. This has been done using a Pharmaceutical Business Plan that obliges SADC member states to coordinate the execution of TRIPS flexibilities.[155]This is the model that India used to advance its economy with the use of TRIPS flexibilities to allow for the manufacture of generic medications.

[152] Neil Wilkof and Shamnad Basheer, eds. *Overlapping intellectual property rights*. (OUP Oxford, 2012)
[153] Ibid.
[154] Southern African Development Community, *Protocol on Trade in the Southern African Development Community*. (1996), 8.
[155] Ibid.

Despite the small victory for the pharmaceutical trading sector mentioned above, TRIPS have for the most part subverted the essence of trade law by imposing IP conditions that in many cases become a barrier to trade. This is the crux of the institutional challenge that the WTO is faced with. Thus, if the concept of legitimate trade championed by the TRIPS agreement is to have any bearing on creating a stable equitable and predictable trade environment, it is necessary to depart from prevailing conditions imposed on regional and domestic entities. Trade ceases to be free and fair when strict IP policy becomes a prerequisite for trade.

Moreover, the potential benefits of using TRIPS flexibilities and exceptions in LDC's and developing countries provides another incentive for IPR harmonization in SADC. Even though it is obligatory for SADC member states to form policies that comply with international IP rules, there is still an opportunity for SADC states along with other developing states to meet the demands of their national interest by maximizing TRIPS flexibilities and exceptions. Drawing on the experiences of other developing countries may provide a blueprint of how SADC member states can strategically benefit from the TRIPS system. Drawing on some examples from developing countries across the world that have managed to successfully maximize TRIPS flexibilities to serve their national interests may provide an incentive for SADC to strategically maximize the international IPR system.

As noted previously, the United States and the European Union are in favour of preserving strict IP protection. An example of this is seen with their endorsement of patent laws that allow pharmaceutical firms that develop and research medications the exclusive rights to sell those medications for up to 20 years.[156] As a response, poorer nations have made efforts to oppose this - one of them being India which presents itself as a perfect example of a middle to low-income country that has managed to maximize the benefits of the TRIPS flexibilities. In 1970, India changed its Patent Act to only protect IP of process patents and not product patents.[157]This meant that if an individual or firm found an alternative method of producing a product that had already been patented, it would be acceptable. This was basically the preamble for the pharmaceutical boom where generic pharmaceutical companies in India grew from roughly 2000 companies in the

[156] Daniel Gervais, The *TRIPS Agreement, drafting history and analysis.* (Sweet and Maxwell, Second Edition, 2003).
[157] Chandra Nath Saha and Sanjib Bhattacharya. *Intellectual property rights: An overview and implications in pharmaceutical industry*. (Journal of advanced pharmaceutical technology & research, 2011) 88.

1960s to about 16 000 in the 1990s.[158] Various types of generic products were able to be sold at varying prices, making medications more accessible to the poor. India then became a very important player in the production of antiretrovirals (ARV's) - producing first line ARV's for early-stage patients as well as second line ARV's for patients at a later stage of HIV/AIDS.[159] These Indian generics for ARV's played a very significant role in African countries being able to treat HIV/AIDS infected people.[160] Accordingly, SADC countries might benefit from incorporating the strategy used by India to maximize the TRIPS flexibilities. This can be done at a policy level by amending IP laws to protect incremental inventions by allowing utility patents, also known as petty patents.

Moreover, China provides an example of how intellectual property laws can be strategically used to encourage innovation. China has historically been considered to be a manufacturing economy with roughly 40% of its GDP emanating from the manufacturing industrial sectors as of 2017.[161] Unfortunately, in most supply chains majority of the profits go to the designer of the product and not the manufacturer. For example, at the back of Apple products there is a label stating "Designed by Apple in California. Assembled in China".[162] It is estimated that China only profits $8.46 from the manufacture of an iPhone while the US profits are more than $100 per phone.[163] Based on the obvious benefits of being a product designer, China has made efforts to shift from having products made in China to having products designed in China. In doing so, China made reforms to their patent laws in 2008 by setting a higher standard for what is considered a novel invention. This helped to serve the Chinese national strategy to advance innovation and technological development because local entrepreneurs were encouraged to take models of existing inventions and simply add minor changes to it in a process of sequential innovation.[164] Today China has become a world leader in sectors like life sciences, motor vehicles, computing and artificial intelligence - these developments have created the environment to protect Chinese innovations at the same level as

[158] Ibid.
[159] Cheri Grace. "The effect of changing intellectual property on pharmaceutical industry prospects in India and China." *DFID Health Systems Resource Centre* (2004): 1-68.
[160] Ibid.
[161] Shu Han, China: GDP Distribution by Economic Sector, (Statista, 2018)
[162] Stephen G, Saunders, *Consumer-generated media and product labelling: designed in California, assembled in China*. (International journal of consumer studies, 2010), 474-480.
[163] Emily Stewart, *How much would the iphone cost if it were made in America.* (Vox, 2018)
[164] Yingying Zhang and Yu Zhou. *The Source of Innovation in China Highly Innovative Systems*. (Palgrave Macmillan, 2014).

developed countries like the US. This is a stark inversion of the Chinese IP environment in the 1990's before TRIPS which was not productive. Despite China's strong economic performance, it is still considered a developing country by the WTO and are thus eligible for TRIPS flexibilities. The above example is an indication that China has strategically made use of TRIPS flexibilities for their benefit, allowing them to reform their national IP laws to correspond to the economic ambitions of their country.

Another TRIPS flexibility worth mentioning is the use of compulsory licensing. This allows protected works to be used by different firms backed by the government for public use.[165] This flexibility has had the most traction in the public health sector. South Africa has ratified the WTO paragraph 6 mechanisms that allows for the issuing of compulsory licenses for export of medicines to countries that lack pharmaceutical manufacturing capability. South Africa would do well to engage with its regional partners to make effective use of the regional waver contained in paragraph 6, to augment relatively small markets by harnessing economies of scale.[166]Another TRIPS flexibility that SADC could maximize is the Most-Favoured Nation Principle which is enshrined in Article 4 of the WTO TRIPS agreement that prevents any discrimination against member states in relation to trade.[167] This means that if a country enters into an agreement with another to remove tariffs on imports, they are required to do the same for all other members of the WTO. There are however exceptions to this rule. This principle can be violated if a country enters into a preferential trade agreement[168] - meaning countries have favourable trade practices between another country (bilateral trade) or with a group of countries (regional or multilateral trade). This is an exception that SADC can invoke for the implementation of the IPR provisions in the SADC Protocol on Trade. Ultimately, this study resolves that IPR's themselves are neither boon nor bane. Rather, it is the strict international pressures to adhere to a uniform IPR system that yields disadvantageous outcomes particularly for developing countries.

[165] WTO, Trips Agreement.
[166] Frank Solomon Sacco. *A comparative study of the implementation in Zimbabwe and South Africa of the international law rules that allow compulsory licensing and parallel importation for HIV/AIDS drugs.* (African Human Rights Law Journal 5, 2005), 105-128.
[167] WTO, *Trips Agreement*. (Article 4)
[168] Ibid.

Conclusion

In conclusion, chapter three has provided a case study of the Southern African Development Community (SADC). The chapter introduced the initiatives that brought IPR to the forefront of the RECs economic agenda. It was revealed that although the SADC Protocol on Trade is the main policy document that informs the SADC IP agenda, it only serves to comply with the TRIPS IPR harmonization agenda. The case study also revealed that the TRIPS agreement as well as other trade agreements like the EU-SADC EPA, AGOA and the AfCFTA all impose IPR obligations on member states that undermine their IPR policy making process. Thus, the international bargaining power for African nations in negotiating new treaties that reflect African needs is still limited to a large extent. The element of conditionality during negotiations for such agreements reflects the unequal power dynamics between rich and poor countries. In spite of the abundance of international treaties that have been imposed on African countries, there still exists a gap in the international IPR harmonization agenda that African countries can take advantage of – much like India and China have done. This is made possible by the WTO-TRIPS flexibilities that exempts developing countries from implementing certain TRIPS obligations. It is not clear whether the SADC's inclination towards greater IPR harmonization is based on an organic appreciation of the benefits of IPR or if this inclination is coerced by pressures from developed countries. Ultimately the case study has served to highlight the power asymmetries between rich and poor countries in the IP-trade environment.

CHAPTER 4

THE SADC EXPERIENCE

Introduction

As revealed in the case study, membership to international organizations and trade agreements impose certain IP obligations that end up limiting the policy options of member states. There are multiple layers of obligations and conditions that sometimes force a standardized approach to IPR on members. A discussion of these multiple layers serves to answer the research question(s) of this study. Findings from the SADC IPR experience described in chapter three will also be used to understand how developing countries navigate the global IPR harmonization agenda. This discussion reveals general lessons coming from the case study that can inevitably contribute to the body of knowledge on the power dynamics of intellectual property in developing countries.

Policy Harmonization

The case study revealed that in line with the attitude of other developing nations, IP seemed to have been accorded low priority by SADC before the mainstreaming of the WTO-TRIPS agreement which began in 1995. The international IPR harmonization agenda of the WTO promoted by developed countries resulted in the inclusion of IP in the 1996 SADC Protocol on Trade. However, this IP inclusion appeared to be arbitrary because there was no communication by SADC recognizing the value of including IP in trade matters. This is demonstrated by the absence of IP in the SADC treaty and RISDP document in 2000 which outlines SADC priorities. However, from 2008 onwards, there seemed to be a radical shift in the SADC IP stance, recognizing IPR protection as an important part of the SADC regional agenda. It is not clear whether this prioritization of IP was encouraged by the fact that many of the SADC states were becoming more and more industrialized and as a response revised their pre-existing IP laws and even introduced new IP laws based on their recognition of the economic benefits of IPR protection. This uncertainty of the reasons for SADC IPR prioritization arises because the inclination of SADC states to prioritize IPR comes at a time when high standards of IPR protection are

increasingly being imposed on developing countries.[169] Thus, it is likely that the sudden shift in IPR prioritization is a result of the increasing pressures from international institutions and foreign governments to harmonize IPR.

Accordingly, this study identifies the WTO-TRIPS agreement as the most comprehensive attempt to harmonize IPR on a global scale. This is evident by the fact that the TRIPS agreement has had a profound impact on IP regimes across the world and essentially monopolized the entire space of IP by setting minimum standards that are obligatory to all WTO member states. The TRIPS agreement represents the globalization of standards for property ownership and has created a new category of tradable capital. Member states and regional blocs are at liberty to implement stricter IP rules where deemed necessary but may not forgo the minimum standards which are legally binding.[170] The post-TRIPS era has been characterised by efforts by WTO member states to implement their TRIPS obligations by revising national legislation to match TRIPS standards. Most importantly for developing and least-developed countries, flexibilities are granted that offer leniency on IP laws and enforcement based on their national interest. All SADC countries mentioned in this study are WTO members and since they all fall under the category of developing and least developed countries they are not obliged to implement all aspects of the TRIPS Agreement. Instead they are granted a transition period where they are only subject to articles 3,4 and 5 of TRIPS.[171]

However, it is important to recognize that this transition period will eventually come to an end and as such developing countries would benefit greatly from maximizing the benefits of TRIPS flexibilities while they still can. After reviewing the IP provisions in the SADC Protocol on trade it is evident that the regional economic community have not maximized TRIPS flexibilities in a way that is applicable to the IP needs of the region. Instead, SADC simply incorporated the TRIPS agreement as it is. The main problem that arises as a result of having no explicit IP policy tailored for the SADC regional bloc is that they essentially forfeit the opportunity to align their IP matters

[169] Caroline B Ncube, Tobias Schonwetter, Jeremy de Beer, and Chidi Oguamanam, *Intellectual property rights and innovation: Assessing regional integration in Africa (ARIA VIII).* (2017), 8.
[170] Michael Finger and Philip Schuler, *Poor people's knowledge: promoting intellectual property in developing countries*. (The World Bank, 2004)
[171] Sangeeta Shashikant, *The African Regional Intellectual Property Organization (ARIPO) Protocol on Patents: Implications for Access to Medicines*. (South Centre, 2014).

to the SADC regional agenda and instead allow their IP regime to serve an international agenda.[172] This is a clear manifestation of the IPR harmonization strategy of the WTO.

The crux of the WTO IPR harmonization strategy lies in its institutional structures which are designed to encourage compliance. For instance, members are obliged to follow WTO enforcement standards under the guidance of the WTO Dispute Settlement Body. Additionally, the Council for TRIPS is in place specifically to monitor the compliance of member states to their IPR obligations.[173] Apart from the structural drivers of TRIPS policy harmonization, the study finds that the driving force for the incorporation of TRIPS in the SADC Protocol on Trade can be narrowed down to the following reasons. Firstly, the deadline for TRIPS compliance by all WTO member states which was extended to July 2021 is soon approaching.[174] Eventually all WTO members will be expected to comply with TRIPS. This means that if SADC states seek to benefit from the trade opportunities offered to WTO members, it is necessary for the REC to incorporate TRIPS into its IP regime.[175] In this regard, harmonization of IP policy is in some way imposed on WTO member states.

Another major driving force for SADC IPR policy harmonization is the fear of retaliation championed by the US. Countries who are engaged in trade agreements risk trade-related retaliation if they fail to modify their IPR systems in a way that offers maximum IP protection. The US have spearheaded the incorporation of stricter IPR in free trade agreements. By way of Section 301 of the Trade Act of 1974, the US essentially impose IP policy harmonization by including IPR as a precondition for trade agreements, limiting trade with countries where there is uncertainty of whether their proprietary rights will be protected to the fullest extent.[176] Thus, the inclination of SADC to accept stricter IP policies than what is necessary may also be attributed to increased competition amoung developing countries for foreign trade and investment opportunities. In this regard, when a country has an IPR system matching countries with a higher

[172] Caroline B Ncube, Tobias Schonwetter, Jeremy de Beer, and Chidi Oguamanam, *Intellectual property rights and innovation: Assessing regional integration in Africa (ARIA VIII)*. (2017), 8.
[173] Mutai, *Intellectual Property Rights Promotion and Protection under the Tripartite Free Trade Area (TFTA)*, (Tralac Working Paper, 2016)
[174] Michael Blakeney and Getachew Mengistie, *Intellectual Property and Economic Development in Sub-Saharan Africa.*(The Journal of World Intellectual Property, 2011), 238-264.
[175] Ibid.
[176] Michael J Finger and Philip Schuler, *Poor people's knowledge: promoting intellectual property in developing countries*. (The World Bank, 2004).

economic performance, they are considered to be more attractive trading partners.[177] This is an important point because the structure of a country's IP policy has until recently not had a significant bearing on trade or investment decisions. Yet, today, it appears to be the norm. Thus, if SADC seeks to benefit from international trading opportunities, their regional IPR system would have to be suitable enough to attract potential trading partners.

With the knowledge that there is a tendency of SADC member states to accept initiatives towards deeper harmonization of IPR - how can this phenomenon be explained? As a starting point to explaining this phenomenon, one might consider the argument that having a standardized IP system optimizes international business and ultimately yields superior economic outcomes.[178] This concept suggests that sometimes states forgo their national interest in order to secure a position in the global economic arena.[179] After a broad review of the SADC case study, it is unlikely that member states are relinquishing their national interest by harmonizing their IP policy with the TRIPS IP policy. Rather this paper considers that the phenomenon of "capture" might provide a more likely explanation for SADC and TRIPS IPR harmonization. This phenomenon is characterised by the use of laws, policy, administrative norms or practices by certain actors to impose policy specifications on countries that may not serve their national interest.

However, it is important to recognize that not all IPR policy harmonization is imposed by the WTO or powerful trading partners. In fact, there are several reasons why SADC countries harmonize IPR by their own accord. For instance, all the SADC member states mentioned in this paper are signatory to the International Convention for the Protection of New Plant Varieties (UPOV) even though the TRIPS do not regard it as a mandatory treaty. This represents an effort to protect local plant breeders from the might of powerful international firms who seek to monopolize the sector by genetically modifying transgenic plants. Another example is provided by ARIPO which serves as a Potential Benchmark for IPR harmonization in SADC. The regional arrangement created by ARIPO provides a common starting point for SADC policy harmonization. Its harmonization efforts have been fairly successful, and these gains are worth acknowledging. Almost all SADC

[177] Mutai, *Intellectual Property Rights Promotion and Protection under the Tripartite Free Trade Area (TFTA)*, (Tralac Working Paper, 2016)
[178] Caroline B Ncube, Tobias Schonwetter, Jeremy de Beer, and Chidi Oguamanam, *Intellectual property rights and innovation: Assessing regional integration in Africa (ARIA VIII)*. (2017), 8.

[179] Ibid.

member states with the exception of South Africa are signatory to ARIPO. This allows member states to apply for IP licences using the same application form and also using the same criteria for licensing. This can be marked as a small victory for SADC as it lessens the administration fees that IP applicants would pay, and it helps to unify the standards for IPR – promoting a "made in Africa" agenda.[180] The key shortfall of ARIPO harmonization is that member states reserve the right to not recognize IP licenses that were issued by ARIPO if the licenses are not in line with their domestic IP law.[181] Thus, ARIPO's harmonization gains can potentially be undermined by member states who developed IP laws with no consideration for existing regional IP bodies like ARIPO. South Africa for example is not a member of ARIPO – instead IP registrations in South Africa are processed through NIPMO. There are certain regulatory and administrative differences between these entities that may result in inconsistent treatment for applicants from different SADC countries. For example, an application for a patent in South Africa may take a few months to be approved but in other SADC countries may take a few years. Ultimately for successful regional IPR harmonization, each SADC member state would have to ensure that their national regulatory environment is considerate of the regulatory environment in other member states.

In addition, another area where SADC, along with other developing countries have championed IPR harmonization outside the international harmonization agenda is in the Public Health Sector - particularly The Doha Declaration on the TRIPS Agreement and Public Health. Although the TRIPS agreement has greatly limited the policy options for developing countries as mentioned above, there is one major advancement in TRIPS that can be attributed to efforts from developing countries. This is known as the Doha Declaration on the TRIPS Agreement and Public Health. SADC countries along with other developing countries have played an active role in this advancement by asserting their negotiating position at the WTO Ministerial Conference in Doha in 2001.[182] Their position was that patent laws under the TRIPS agreement restricted access to affordable medications.[183]Thus the Doha Declaration represents a victory for the public health

[180] Caroline B Ncube, Tobias Schonwetter, Jeremy de Beer, and Chidi Oguamanam, *Intellectual property rights and innovation: Assessing regional integration in Africa (ARIA VIII).* (2017), 8.

[181] Henry Kibet Mutai, *Intellectual Property Rights Promotion and Protection under the Tripartite Free Trade Area (TFTA): Proposals for an Intellectual Property Protocol*, (Tralac Working Paper, 2016)
[182] Thomas A Haag, *TRIPS since Doha: How far will the WTO go toward modifying the terms for compulsory licensing.* (J. Pat. & Trademark Off. Soc'y, 2002), 945.
[183] Ibid.

sector and also serves as an example of how developing countries are resisting systems of control and compliance in the space of IP.

Policy Disharmony

The above-mentioned agreements can be seen as a force for increased IP policy harmonization in SADC. However, the country-based assessment in chapter 3 does not seem to suggest that a harmonized IP system is best suited for SADC. Rather, efforts to harmonize SADC IP laws to international IP laws have only highlighted the disadvantages of IPR in the developing world - most controversially in the public health sector. Thus, we consider the alternative - an unharmonized IP system. As described in chapter 3, there are numerous discrepancies in the implementation of international and regional IP-related obligations within the SADC community. The case study in chapter 4 reveals that there are significant differences in the IPR regimes of SADC states on multiple levels. There seems to be the greatest agreement with the scope of patent protection because it is evident that all SADC states exclude sensitive sectors from patentability in accordance with the gains from the Doha Declaration mentioned earlier. The issuing of compulsory licenses is also a common feature - this is permitted if patents are left idle for a period of up to four years. In the area of copyright and trademark protection there appears to be differences in duration of protection as well as differing types and means of IP protection with the severity of law enforcement being stricter in some countries than others - for example, Zambian counterfeiting being punishable by 5 years in prison.[184] Also, there seems to be some difficulty in operationalizing the protection of trade secrets - this might be due to the fact that the non-disclosure characteristic of trade secrets leaves room for false claims of infringement to be made by the owner, making it difficult to litigate cases with certainty.

These differences have received a lot of attention at international trade and IP forums. Patents seem to be at the core of the discussion because there has been difficulty in reaching a consensus of what is patentable and what is not. Many developing countries assert that pharmaceutical products, food, fertilizers, seeds and insecticides should not be patented because they fall under the category of "basic needs". If they are patented, the pricing of such essential products are at the mercy of powerful enterprises from the developed world, often rendering them inaccessible to

[184] Michael Blakeney and Getachew Mengistie, *Intellectual Property and Economic Development in Sub-Saharan Africa.*(The Journal of World Intellectual Property, 2011), 238-264.

poorer populations.[185] In response, there has been a lot of backlash from enterprises who assert their right to protect their creations as stipulated in Article 27 of the Universal Declaration of Human Rights, which provides for the following: *"Everyone has the right to benefit from the protection of moral and material interests resulting from any scientific, literary or artistic productions of which he is the author".*[186] All of these inter-country differences in IPR represents disharmony between the developed and developing world as well as disharmony amoungst developing countries - as represented by the member states of the SADC community.

Hence, with the knowledge that discrepancies in IPR exist, this study now considers how they can be explained. These discrepancies undermine efforts to establish a common regional IP space. The following discussion presents possible reasons for discrepancies in regional IP policy harmonization as well as differences in the implementation of international IP obligations in the SADC region. As a starting point, one could argue that policy development happens rather slowly and that even though SADC member states have implemented some IP policies and not others, it does not mean that they will not do so in future. In fact, many SADC states are still in the process of developing their own national IP policy documents to replace the outdated policies that were formed during colonization with the intention to move towards the TRIPS standard. An additional argument could be that in countries with less political development, where government actions lack transparency and where civil society have not been exposed to debates about IP rights, policy decisions on IP matters tend to be arbitrary without much consideration of regional commitments to harmonize policy. This is not necessarily a bad thing – in fact the absence of strict IPR enforcement in the region allows countries to alter their IPR incrementally as they become more technologically developed or as the standards for technology changes.

Another argument in favour of IP policy disharmony is the economic incentive created in countries that lack strong, innovative research capacity but have a fair or strong production capacity.[187] It is more profitable to have weaker, more disintegrated IP laws in economies that are able to imitate

[185] Michael Finger and Philip Schuler, *Poor people's knowledge: promoting intellectual property in developing countries*. (The World Bank, 2004)
[186] UN General Assembly, *Universal Declaration of Human Rights*, 27 (III) A (Paris, 1948)
[187] Khan, R.; Udell, L. J.; Croze, D.; Yap, A.; Chien-Hale, E.; Chagoya-Cortés, H. E.; & Chowdhury, S, *Importance of IP and Innovation for the Development of Emerging Nations: Lessons Learned from Silicon Valley and Other Regions*. (Les Nouvelles - Journal of the Licensing Executives Society, 2017), 73-84.

existing products through reverse engineering or slight adaptation in a way that is still within the law by the narrowest of margins. These are characterised as adaptive efforts. An example of this is seen by ranking reports from the International Trade Commission in 1988 that showed that countries that had the most notable manufacturing capacity were ranked as having the most inefficient IPR systems - including countries like China, India, Taiwan, Korea, Mexico and Brazil.[188] This strategy is a means of averting the cost that would be incurred from protecting products from foreign enterprises by way of rents and royalties. Unfortunately, a few problems arise when this reasoning is applied to an African context, particularly because it assumes that manufacturing capacity is detached from research capacity. Nevertheless, this approach still provides a likely explanation for why there are discrepancies in IPR harmonization for some developing countries.

Conclusion

In conclusion, chapter 4 has provided the outcome of the research that was conducted through discussions about some of the reasoning for IPR harmonization. The rationale for acceding to the international IPR system is based on arguments that strong IPR yields favourable trade and investment outcomes. However, the idea that greater IPR harmonization will yield favourable outcomes for all countries, leaving no country worse off is doubtful. This paper finds that when developing countries accede to the international IPR system, they do so with the knowledge that there are certain local demands that will be forfeited in order to benefit from international trade deals. Based on this argument SADC may be incentivized to harmonize their IP systems in line with the prevailing international IP system in order to benefit from trade and investment opportunities even when their social welfare and other local interests are jeopardized. Moreover, on the opposing side of the IP-trade debate, this chapter has also presented discussions about some of the economic reasons for discrepancies in IPR implementation. This chapter finds that the prioritization of IPR in SADC was not entirely consensual, which is why there are discrepancies in IPR implementation amoungst individual SADC member states. The main reason why some countries opt to depart from the prevailing IPR systems is based on their apprehension to the applicability of IP laws to their realities.

[188] US International Trade Commission. (1988)

CHAPTER 5

CONCLUSION

In conclusion, it is evident that intellectual property matters are a relevant but contentious area of trade that requires a strategic balance between protecting the rights of creators as well as that of users. This paper has explored the multiple layers of IPR obligations that ultimately determine the type of IPR protection offered by SADC. After reviewing the SADC Protocol on Trade document, it is evident that SADC countries have been unable to coordinate a uniform regional IP agenda that departs from the prevailing international IP agenda in order to move towards a SADC regional agenda that embodies a "made in Africa" framework. Efforts to harmonize SADC intellectual property rights seem to strengthen compliance to the WTO-TRIPS agreement. Thus, the provisions for intellectual property found in the SADC Protocol on trade represents compliance to the internationalisation of IP agenda championed by the World Trade Organization and trade agreements with more developed countries.

Unfortunately, the provisions for IP found in the TRIPS agreement may not be best suited to the demands of the SADC region. As such it would be unwise for SADC to fully comply with TRIPS without first assessing whether their domestic policy capacity will allow them to balance their domestic demands with international obligations. This study has revealed that TRIPS puts a strain on the domestic capacity of SADC member states because it imposes more restrictive rules that are legally binding. The TRIPS agreement contains provisions that play a fundamental role in the options developing countries have in designing their intellectual property policy. The fact that SADC IP policy requires states to follow TRIPS measures goes against the spirit of regional integration because TRIPS promotes a more protectionist stance to trade that is the antithesis of the free-trade agenda of the SADC community. Even though the SADC Protocol on Trade is not a legally binding document, effort must still be given to the intention of the document to achieve certain regional results through ongoing regulatory harmonization over an extended period.

SADC member states ought to seek consistency between intra-regional, inter-regional as well as their multilateral commitments and negotiations on trade. This objective is important for several reasons. SADC member states are involved in trade negotiations with other entities within the region, including under COMESA, the EAC and the Tripartite Free Trade Agreement.

Additionally, SADC is also involved in trade agreements – mostly with developed countries where IP standards are incorporated as a precondition to trade. Apart from making regional commitments on market access and national treatment in accordance with the SADC regional integration agenda, all international agreements on trade create obligations on approaches to domestic regulation - which undermine the ability of a country to meet their regional integration commitments.

Lastly, but perhaps most importantly, all but one SADC member states are members of the WTO and as such have certain commitments and are obliged to implement those commitments. Since the TRIPS is the prevailing international IP system, SADC would benefit from finding ways to strategically maximize the intended benefits of TRIPS in a way that suits the region. The examples in chapter three of how developing countries like India and China have made use of the international IP regime to serve their national interests help to dispel the misconception that IP laws only benefit developed countries. The study reveals that there is indeed an opportunity for developing countries to strategically use regional IP regimes to serve their common interests by maximizing the use of TRIPS flexibilities. However, this cannot be possible if developing countries are pressurized to comply with stricter TRIPS regulations which inevitably annul the TRIPS flexibilities granted by the WTO to developing countries.

It was also revealed that when implementing international and regional intellectual property policy it is necessary to consider the context in which the policy will be applied. This is because different social, political or economic realities may hinder or enhance the implementation of intellectual property policy. This paper argues that the difficulty in harmonizing SADC IP policy also stems from the differing priorities of member states with regards to IP matters. It was found that conflicting national commitments to outside trade agreements like the EU-South Africa economic partnership as well as differing domestic regulatory structures like ARIPO and NIPMO undermines the objective of the SADC Protocol on Trade. This decreases the likelihood of establishing a truly integrated market for SADC. However, there is some indication that a common denominator amoungst member states can be defined and essentially form the basis of a strategic SADC IP policy framework that serves the regional agenda. Deeper harmonisation of SADC policy is indeed possible, particularly due to commonalities identified amoungst the five countries that were studied in this paper, namely South Africa, Botswana, Zimbabwe, Malawi and Zambia. The case study revealed that each of these countries have been wracked by economic, social and

political inequalities and as such international IP obligations have put a strain on access to knowledge and access to affordable medications in those countries. Another commonality is that each of the countries studied have their own respective indigenous communities that are rich in biodiversity and traditional knowledge but are threatened due to standards for international IP protection that exclude them for not meeting the requirement for novelty of an idea. As such there is an opportunity to harness IP laws for the purpose of addressing these socio-economic and socio-political matters.

All in all, this study has highlighted and explained some of the shortfalls in harmonizing the SADC regional IP regime with the international IP regime as well as the difficulty in devising national IP systems in fulfilment of their international and regional obligations. The case study reveals that even if SADC manages to fulfil all their international IP policy obligations, they might not be applicable to the IP needs of African states. Particularly with regards to public policies that are critical to SADC and all developing countries. In a similar way that the efforts to harmonize TRIPS IP obligations in developing countries has had adverse effects on sensitive sectors, it is likely that efforts to harmonize the IP policy of SADC member states may incur some costs along with the intended benefits of harmonization. Thus, all of the factors discussed throughout the study either directly or indirectly affect the type and scope of commitments to the IP provisions in the SADC Trade Protocol and ultimately, aspirations of establishing an integrated market in the region. This study has merely scratched the surface of the topic. If this study motivates others to pay closer attention to the fabric of intellectual property systems from an African context, then it will have served its purpose.

RECOMMENDATIONS

This research paper has highlighted some of the shortcomings in the SADC intellectual Property regime. The challenge now becomes how to make up for those shortcomings. The following is a set of recommendations that may help the SADC community in addressing some of their IPR-related challenges. These recommendations may also be useful to other developing countries outside of SADC. Moreover, negotiations on the future of IPR in Africa are still underway continentally in PAIPO and the AfCFTA, regionally in SADC and domestically in respective member states - these recommendations may also interest those groups. The following will be

important for further discussions on the policy space of African continental and regional intellectual property. How can SADC countries respond in a sensible manner to the multiple layers of IPR obligations?

Firstly, SADC would benefit greatly by explicitly defining what a SADC regional IP policy framework would consist of as well as how far harmonisation of standards should go - to form a clear regional agenda for IP. The current provisions for IP in the SADC Protocol on Trade requires members to conform to TRIPS obligations. This study recommends that SADC develop their own IP provisions with norms that are specifically tailored to the economic needs of SADC as well as their research capabilities, financial and institutional limitations. This would require more effective national IP protection systems that will protect public policies that are vital to SADC and developing countries. There are various methods of IP policy harmonization that SADC could employ. Procedural law harmonization serves to create a common procedure for the processing and granting of IP rights. Substantive law harmonization would articulate the rules of engagement and how states should behave in any given IP related matter.[189] Another method of harmonization would be to cooperate in non-binding endeavours. Alternatively, SADC could make use of a combination of each of the above-mentioned methods of harmonization. This would serve the purpose of defending developmental needs at a policy level.

Although it is also important to consider how the structure of SADC IPR would affect their engagements in the international economic arena, it should be balanced with the consideration of how such engagements might adversely affect sensitive sectors like public health. It appears in order to cater to such welfare demands, the level of IP protection offered in developing countries should be lower. In addition, SADC needs a more independent strategy for IP capacity building as opposed to the current involvement of international bodies such as WIPO and the EU who merely seek to align SADC to the status quo of IP.

Lastly, intellectual property matters have largely been considered a policy matter to be dealt with in law spaces. However intellectual property is not a topic that is limited to the legal sector. Contrarily, IP crosses into disciplines such as medicine, engineering, agriculture and food security, the internet and information communication technology (ICT), biotechnology, entertainment,

[189] Henry Kibet Mutai, *Intellectual Property Rights Promotion and Protection under the Tripartite Free Trade Area (TFTA): Proposals for an Intellectual Property Protocol*, (Tralac Working Paper, 2016)

literature, traditional knowledge systems and human rights amoungst others. Since intellectual property rights are personal rights that depend on individual creators to seek formal protection for their inventions, this paper recommends that SADC states conduct public awareness campaigns to encourage African creators to monetize their ideas. This will be a helpful step towards the development of knowledge-based economies in Africa.

BIBLIOGRAPHY

Adewopo, A. (2001). The Global Intellectual Property System and Sub-Saharan Africa-A Prognostic Reflection. *U. Tol. L. Rev.*, *33*, 749.

AGOA. (2015). Eligibility Process and Economic Development in Sub-Saharan Africa. Government Accountability Office.

Babbie, E. and Mouton, J. (2010). The practice of social research. Cape Town: Oxford University Press. 123.

Beer, J. D., Baarbé, J., & Ncube, C. B. (2018). Evolution of Africa's Intellectual Property Treaty Ratification Landscape. *African Journal of Information and Communication*, *22*, 53-82.

Bhattacherjee, A. (2012). Social science research: Principles, methods, and practices. 9.

Biadgleng, E. T., & Maur, J. C. (2011). The Influence of Preferential Trade Agreements on the Implementation of Intellectual Property Rights in Developing Countries: A First Look. *UNCTAD-ICTSD Project on IPRs and Sustainable Development Paper*, (33).

Bidault, F. and Fischer, W.A. (1994). Technology transactions: networks over markets. R&D Management, 24, 373–386.

Blakeney, M., & Mengistie, G. (2011). Intellectual Property and Economic Development in Sub Saharan Africa. *The Journal of World Intellectual Property*, *14*(3-4), 238-264.

Bodenhausen, G. H. C. (1968). *Guide to the Application of the Paris Convention for the Protection of Industrial Property, as Revised at Stockholm in 1967* (Vol. 611). Wipo. 19.

Braga, C. A. P. (1995). *Trade-related intellectual property issues: the Uruguay Round agreement and its economic implications*. World Bank.

Braga, C. A. P., & Fink, C. (1996). The Economic Justification for the Grant of Intellectuall Property Rights: Patterns of Convergence and Conflict. *Chi.-Kent L. Rev.*, *72*, 439.

Brockhoff, K. (2010) *Research and Development: Planning and Control*. *Walter de Gruyter.*

Cardoso, A., & Teixeira, A. A. (2009). Returns on R&D investment: A comprehensive survey on the magnitude and evaluation methodologies. *Institute for Systems and Computer Engineering of Porto, Innovation and Technology Transfer Unit, Working Paper*.

Chiwenga, E. F. (2010). The role of IPR on maize output in Zimbabwe.

David, P. A. (1993). Intellectual property institutions and the panda's thumb: patents, copyrights, and trade secrets in economic theory and history. *Global dimensions of intellectual property rights in science and technology*, *19*, 29.

Department of Trade and Industry. (2008). Companies and Intellectual Property Commission. Republic of South Africa. Accessed January 13, 2019: https://www/thedti.gov.za/agencies/cipc.jsp

Dixon, A. N. (2011). Intellectual Property: Powerhouse for Innovation and Economic Growth.

Drahos, P. (2016). *A philosophy of intellectual property*. Routledge.

Dutta, S.; Lavin, B. and Wunsch-Vincent. (2017). The Global Innovation Index 2017: Innovation Feeding the World. Cornell SC Johnson College of Business. xviii.

European Commission. (2014). *The Cotonou Agreement.* The European Union.

European Commission. (2016). Economic Partnership Agreement between the European Union and its Member States of the one part and the SADC EPA States of the Other Part. Official Journal of the European Union.

Finger, J. M., & Schuler, P. (Eds.). (2004). Poor people's knowledge: promoting intellectual property in developing countries. The World Bank.

Ford, D. and Ryan, C. (1977). The marketing of technology. European Journal of Marketing, 11, 369– 382.

Ford, D. (1985). The management and marketing of technology. In Lamb, R. and Shrivastava, P. (eds), Advances in Strategic Management. London: JAI Press.

Fukunaga, Yoshifumi. (2008) Enforcing TRIPS: Challenges of Adjudicating Minimum Standards Agreements. *Berkeley Tech,* 867.

Gathii, J. T. (2001). The legal status of the Doha Declaration on TRIPS and public health under the Vienna Convention on the Law of Treaties. *Harv. JL Tech*, *15*, 291.

Gervais, D. J., & Gervais, D. J. (1998). *The TRIPS agreement: drafting history and analysis* (Vol. 2). London: Sweet & Maxwell.

GlobeNewswire. (2019). Coca-Cola Consolidated, Inc. Announces First Quarter Dividend. Nasdaq. Accessed January 11, 2019: https://www.nasdaq.com/press-release/cocacola-consolidated-inc-announces-first-quarter-dividend-20190111-00579

Grace, C. (2004). The effect of changing intellectual property on pharmaceutical industry prospects in India and China. *DFID Health Systems Resource Centre*, 1-68.

Granstrand, O. (2000a). The Economics and Management of Intellectual Property: Towards Intellectual Capitalism. Northampton, MA: Edward Elgar.

Greenhalgh, Christine, and Mark Rogers. (2010). *Innovation, intellectual property, and economic growth*. Princeton University Press. 20.

Grosse Ruse-Khan, H. (2011). The international law relation between TRIPS and subsequent TRIPS-Plus free trade agreements: Towards safeguarding TRIPS flexibilities?. *Journal of Intellectual Property Law*, *18*(2), 1.

Guellec, D and B van Pottelsberghe de la Potterie. (2003). The Impact of Public R&D Expenditure on Business R&D. Economics of Innovation and New Technologies, 12(3): 225-243.

Haag, T. A. (2002). TRIPS since Doha: How far will the WTO go toward modifying the terms for compulsory licensing. J. Pat. & Trademark Off. Soc'y, 84, 945.

Han, S. (2018). China: GDP Distribution by Economic Sector. *Statista*. Accessed February 5, 2019: https://www.statista.com/statistics/270325/distribution-of-gross-domestic-product-gdp-across-economic-sectors-in-china/

Hassan, E., Yaqub, O., & Diepeveen, S. (2010). Intellectual property and developing countries. 40.

Ismail, K., Majid, I. A. and Omar, W. Z. W. (2011). Commercialization of University Patents: A Case Study. Journal of Marketing Development and Competitiveness, 5(5): 80-92.

Jung, Y., & Kwon, S. (2015). The effects of intellectual property rights on access to medicines and catastrophic expenditure. *International Journal of Health Services*, *45*(3), 507-529.

Kanja, M.; George, M. (2006). Intellectual Property Law. University of Zambia.

Karjiker, S. (2018). Intellectual property as real security. *South African Intellectual Property Law Journal*, *6*(1), 1-23.

Khan, R.; Udell, L. J.; Croze, D.; Yap, A.; Chien-Hale, E.; Chagoya-Cortés, H. E.; & Chowdhury, S. (2017). *Importance of IP and Innovation for the Development of Emerging Nations: Lessons Learned from Silicon Valley and Other Regions*. Les Nouvelles - Journal of the Licensing Executives Society. 73-84.

Kitch, Edmund W. "The nature and function of the patent system." *The Journal of Law and Economics* 20, no. 2 (1977): 265-290.

Kongolo, T. (2016). *African contributions in shaping the worldwide intellectual property system*. Routledge. 83.

Kornfield, J. 2011. Optimization of the technology transfer process between universities and companies of the private sector in relation to the incentive problem. Master's in Business Administration, Aarhus University.

Liu*, W. H., & Lin, Y. C. (2005). Foreign patent rights and high-tech exports: evidence from Taiwan. *Applied Economics*, *37*(13), 1543-1555.

Markman, G., Gianiodis, P., & Phan, P. (2006). An agency theoretic study of the relationship between knowledge agents and university technology transfer offices. *IEEE Trans. Eng. Manag*, *55*, 29-36.

Maskus, K. E., & Penubarti, M. (1995). How trade-related are intellectual property rights?. *Journal of International economics*, *39*(3-4), 227-248.

Mengistie, G. (2009). The impact of the international patent system on developing countries. *J. Ethiopian L.*, *23*, 161.

Microsoft. (2006). More African countries to automate IP registration. Accessed December 15, 2018: https://www.microsoft.com/africa/4afrika/automate-ip.aspx

Mirza, B. (2005). A DILEMMA OF INTELLECTUAL PROPERTY RIGHTS♦ FOR DEVELOPING COUNTRIES?. *The Paper is Part of the Exam on Economics of Technological Innovation", A PhD Session Led by Bart Verspagen UN University-MERIT, the Netherlands.[5]. Dorchester County, Definition of Terms*.

Morris, M., & Fessehaie, J. (2014). The industrialisation challenge for Africa: Towards a commodities based industrialisation path. *Journal of African Trade*, *1*(1), 25-36.

Mugabe. J. O. (2011). Science, Technology and Innovation in Africa's Regional Integration. ACODE Policy Research Series. 18-23.

Mutai. H. K. (2016). Intellectual Property Rights Promotion and Protection under the Tripartite Free Trade Area (TFTA): Proposals for an Intellectual Property Protocol. *Tralac*. 1-23.

Ncube, C. B. (2002). Copyright Protection of Computer Programs, Computer-Generated Works and Databases in Zimbabwe'. *The Journal of Information, Law and Technology (JILT)*, *2*, 02-2.

Ncube, C. B. (2013). Harnessing intellectual property for development: some thoughts on an appropriate theoretical framework. *Potchefstroom Electronic Law Journal/Potchefstroomse Elektroniese Regsblad*, *16*(4), 368-395.

Ncube, C., & Laltaika, E. (2013). A new intellectual property organisation for Africa?.

Ncube, C. B. (2015). *Intellectual property policy, law and administration in Africa: Exploring continental and sub-regional co-operation*. Routledge.

Ncube, C. B., Schonwetter, T., de Beer, J., & Oguamanam, C. (2017). Intellectual property rights and innovation: Assessing regional integration in Africa (ARIA VIII).

Nkomo, M. (2014). Regional integration in the area of intellectual property: The case for Southern African Development Community involvement. *Law, Democracy and Development*, *18*, 317-333.

Ngubula, M. (2013). *The SADC protocol on trade in services: a review of the protocol in light of the GATS and other SADC protocols and what it means for trade in services in the region*(Doctoral dissertation, University of Cape Town).

Nwauche, E. 2003. *An Evaluation of the African Regional Intellectual Property Rights Systems*. The Journal of Intellectual Property. 137-138.

OECD, (2002). *Foreign Direct Investment for Development.* 3-32.

Ostergard, R. L. (1999). Intellectual property: a universal human right?. *Human Rights Quarterly*, *21*(1), 156-178.

Park, W. G., & Lippoldt, D. (2003). *The impact of trade-related intellectual property rights on trade and foreign direct investment in developing countries*. OECD.

Peukert, A. (2012). The colonial legacy of the international copyright system. 40.

Primo Braga. C. A., Fink. C., & Sepulveda. C. P. (2004). How Stronger Protection of Intellectual Property Rights Affects International Trade Flows'. In C. Fink and E. Mansfield (eds), Intellectual Property and Development: Lessons from Recent Economic Research. *World Bank/Oxford University Press*. 19-40.

Rafiquzzaman, M. (2002). The impact of patent rights on international trade: Evidence from Canada. *Canadian Journal of Economics/Revue canadienne d'économique*, *35*(2), 307-330.

Rahmatian, A. (2009). Neo-Colonial Aspects of Global Intellectual Property Protection. The Journal of World Intellectual Property, 12(1), 40-74.

Rasmussen, E. and Rice, M. P. 2012. A framework for government support mechanisms aimed at enhancing university technology transfer: the Norwegian case. International Journal of Technology transfer and Commercialization, 11(1/2): 1-25.

Ricketson, S. (1987). *Berne Convention for the Protection of Literary and Artistic Works: 1886-1986*. Centre for Commercial Law Studies, Queen Mary College: Kluwer. 799-806.

Ruse-Khan, H. G. (2010). The International Law Relation between TRIPS and Subsequent TRIPS-Plus Free Trade Agreements: Towards Safeguarding TRIPS Flexibilities. *J. Intell. Prop. L.*, *18*, 325.

Sacco, S. F. (2005). A comparative study of the implementation in Zimbabwe and South Africa of the international law rules that allow compulsory licensing and parallel importation for HIV/AIDS drugs. *African Human Rights Law Journal*, *5*(1), 105-128.

SADC. (1996). Protocol on Trade in the Southern African Development Community.

SADC. (2008). Science and Technology. Accessed January 14, 2019: https://www.sadc.int/issues/science-technology/

SADC. (2015). Consolidated Text of the Treaty of the Southern African Development Community. 5-7.

Saha, C. N., & Bhattacharya, S. (2011). Intellectual property rights: An overview and implications in pharmaceutical industry. *Journal of advanced pharmaceutical technology & research*, *2*(2), 88.

Samuelson, P. (1999). Challenges for the World Intellectual Property Organization and the Trade-related Aspects of Intellectual Property Rights Council in Regulating Intellectual Property Rights in the Information Age. *European Intellectual Property Review*, *21*, 578-591.

Sandrey, R. (2013). *An Analysis of the SADC Free Trade Area. Stellenbosch*. Tralac. 1.

Saunders, S. G. (2010). Consumer-generated media and product labelling: designed in California, assembled in China. *International journal of consumer studies*, *34*(4), 474-480.

Schrader, S. (1991). Informal technology transfer between firms: cooperation through information trading. Research Policy, 20, 153–170.

Shashikant, S. (2014). *The African Regional Intellectual Property Organization (ARIPO) Protocol on Patents: Implications for Access to Medicines*. South Centre.

Sihanya, B. (2010). Intellectual Property Rights in Kenya: Combating Counterfeit Trade in Kenya. Konrand Stiftung Nairobi, 229.

Smith, P. J. (2001). How do foreign patent rights affect US exports, affiliate sales, and licenses?. *Journal of International Economics*, *55*(2), 411-439.

Smith, R. D., Correa, C., & Oh, C. (2009). Trade, TRIPS, and pharmaceuticals. *The Lancet*, *373*(9664), 684-691.

Stewert, E. (2018). How much would the iphone cost if it were made in America?. Vox. Accessed November 13, 2018: https://www.vox.com/technology/2018/9/13/17851052/apple-iphone-price-china-trump-us-trade

Stiglitz, J. (2003). Globalization and development. *Held and Koenig-Archibugi*, 47-67.

Stiglitz, J. E. (2003). Democratizing the International Monetary Fund and the World Bank: governance and accountability. *Governance*, *16*(1), 111-139.

The Republic of Zimbabwe. (2018). The Zimbabwe National Intellectual Property Policy and Implementation Strategy 2018 - 2022. The Ministry of Justice, Legal and Parliamentary Affairs.

Tomlinson, M. (1999). The learning economy and embodied knowledge flows in Great Britain. *Journal of Evolutionary economics*, *9*(4), 431-451.

Umahi, O. T. (2011). Access to Medicines: The Colonial Impacts on Patent Law of Nigeria. *Available at SSRN 1975928*.

United International Bureaux for the Protection of Intellectual Property. (1883). Paris Convention for the Protection of Industrial Property. Geneva.

United International Bureaux for the Protection of Intellectual Property. (1886). Berne convention for the protection of literary and artistic works. Geneva.

UN General Assembly. (1948). Universal Declaration of Human Rights. Paris. 27.

Wilkof, N., & Basheer, S. (Eds.). (2012). *Overlapping intellectual property rights*. OUP Oxford.

World Bank. (2018). World Bank Annual Report 2018. 2-95.

World Intellectual Property Organization. (2011). What Is Intellectual Property? World Intellectual Property Organization. 3-23.

World Intellectual Property Organisation. (2008). What is a trade secret?. Accessed December 15, 2018: (https://www.wipo.int/sme/en/ip_business/trade_secrets/trade_secrets.htm

World Intellectual Property Organisation. (2008). Unfair Competition. Accessed December 15, 2018: https://www.wipo.int/.../en/wipo.../wipo_kipo_kipa_ip_ge_08_www_109885.ppt

World Economic Forum. (2017). The Africa Competitiveness Report 2017. 32-33.

Yang, C. H., & Huang, Y. J. (2009). Do intellectual property rights matter to Taiwan's exports? A dynamic panel approach. *Pacific Economic Review*, *14*(4), 555-578.

Zagame, P. 2010. The Costs of a Non-Innovative Europe: What Can We Learn and What Can We Expect from the Simulation Works. Accessed May 12, 2018 from: http://ec.europa.eu/research/social-sciences/policy-briefs-research-achievements_en.html

Zhang, Y., & Zhou, Y. (2014). *The Source of Innovation in China Highly Innovative Systems*. Palgrave Macmillan.