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ADVANCES, FALSE STARTS, AND OUTSTANDING REFORM IMPERATIVES IN NIGERIAN DERIVATIVES LAW AND REGULATION

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Collingwood College
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Abstract

Many developing countries are eager to leverage derivatives to enhance their financial markets and—by extension—their broader economic compacts. A clear legal and regulatory framework is integral to the establishment and vibrancy of any derivatives market. These being so, this study deconstructs the law and regulation of derivatives in Nigeria with the objective of generating a clear understanding of the extant regulatory framework, given recent attempts at reform. Chiefly, the objective is to determine the extent to which extant Nigerian law and regulation (a) engenders legal certainty and (b) accentuates transactional efficacy in the derivatives market. Mainly, this dissertation argues that the intended effects of recent derivatives reform will not be achieved under current terms, as contextual and substantive attention was not paid to the ontology of the domestic legal and financial system before the enactment of recently transplanted reform. Relatedly, it is contended that the transnational flow of reform into Nigerian law was/is defective. Consequently, much, it will be seen, has been lost in the reform process. Finally, it is argued that the appurtenant infrastructure surrounding the derivatives regulatory framework which is supposed to underpin associated functions in the derivatives market remains sub-optimally ordered.

This work produces three contributions to knowledge. Firstly, situating what is Nigerian derivatives law within the broader field of international financial law, it offers the first documented exploration of the derivatives regulatory scheme in this important developing country, where clarity has been hitherto limited at best (as is evidenced by the continued existence and persistence of fractures documented in this study). Secondly, it develops an analytical framework designed to enhance understanding as to how financial regulatory reform might be pursued in these kinds of jurisdictions (i.e., developing countries). This framework can be applied to other financial market segments (e.g., equities, commodities, or structured products) where reform might be in contemplation. Thirdly, building on comparative perspectives, this work offers points of reform, which, if implemented, will contribute to reordering the regulatory framework, invigorating the Nigerian derivatives market, and de-risking the broader financial system.

List of Abbreviations

ABS – Asset-backed securities

AIG – American Insurance Group

AMCON – Asset Management Corporation of Nigeria

BA 2004 – *Bankruptcy Act 2004*

BIS – Bank for International Settlements

BOE – Bank of England

BOFIA 2020 – *Banks and Other Financial Institutions Act 2020*

CAC – Corporate Affairs Commission

CAMA 2020 – *Companies and Allied Matters Act 2020*

CBN – Central Bank of Nigeria

CBN Act 2007 – *Central Bank of Nigeria Act 2007*

CBO – Collateralised bond obligations

CBOT – Chicago Board of Trade

CCP – Central clearing counterparty

CDO – Collateralised debt obligations

CDS – Credit default swaps

CFO – Collateralised fund obligations

CFTC – Commodity Futures Trading Commission

CLO – Collateralised loan obligations

CME – Chicago Mercantile Exchange

COBS – FCA Conduct of Business Sourcebook

COMEX – a Designated Contract Market for CME Group

COVID-19 – Coronavirus disease

CPSS – Committee on Payment and Settlement Systems

CPSS-IOSCO Principles – *Principles for Financial Market Infrastructures* issued by the CPSS and IOSCO

ECB – European Central Bank

ECC – European Commodity Clearing

EEA – European Economic Area

EMIR – Regulation on OTC derivatives, central counterparties, and trade repositories (648/2012)

EMIR Refit Regulation – Regulation amending EMIR (2019/834)

ERDB – European Bank for Construction and Development

ES – Expected shortfall

ESMA – European Securities and Markets Authority

ETD – Exchange-traded derivatives

EU – European Union

EU Directive on Financial Collateral Arrangements – Directive 2002/47/EC of the European Parliament and of the Council of 6 June 2002 on Financial Collateral Arrangements

FCA – Financial Conduct Authority

FEMM Act 1995 – *Foreign Exchange (Monitoring and Miscellaneous Provisions) Act 1995*

FIRS – Federal Inland Revenue Service

FMI – Financial market infrastructure

FSA – Financial Services Authority

FSB – Financial Stability Board

FSMA – Financial Services and Markets Act 2000

FSRCC – Financial Services Regulation Coordinating Committee

FX – Foreign exchange

G20 – Group of 20 Finance Ministers and Central Bank Governors

GDP – Gross Domestic Product

GFC – Global Financial Crisis

IMF – International Monetary Fund

IOSCO – International Organisation of Securities Commissions

ISA 2007 – *Investment and Securities Act 2007*

ISDA – International Swaps and Derivatives Association

LDR – Loan to deposit ratio

MAR – Market Abuse Regulation (596/2014)

MBS – Mortgage-backed securities

MiFID II – Markets in Financial Instruments Directive (2014/65/EU)

MiFIR – Markets in Financial Instruments Regulation (600/2014)

NAICOM – National Insurance Commission

NCX – Nigerian Commodity Exchange

NDIC – Nigeria Deposit Insurance Corporation

NDIC Act 2004 – *Nigeria Deposit Insurance Corporation Act 2004*

NGX Group – Nigerian Exchange Group Plc. (Formerly known as the Nigerian Stock Exchange)

NNPC – Nigerian National Petroleum Corporation

NYMEX – The New York Mercantile Exchange

OECD – Organisation for Economic Cooperation and Development

OPEC – Organisation of the Petroleum Exporting Countries

OTC – Over the counter

PenCom – National Pension Commission

PRA – Prudential Conduct Authority

RAO – Financial Services and Markets Act 2000 (Regulated Activities) Order 2001 (SI 2001/544) (as amended)

REMIT – Regulation on wholesale energy market integrity and transparency

Repo – Repurchase agreement

SEC – Securities and Exchange Commission

SEC Derivatives and CCP Rules – SEC *Rules on Regulation of Derivatives and Central Counterparties 2019*

Short Selling Regulation – Regulation on Short Selling and Certain Aspects of Credit Default Swaps (236/2012)

SPV – Special purpose vehicle

SRO – Self-regulatory organisation

UK – United Kingdom

US – United States

US SEC – United Stated Securities and Exchange Commission

VaR – Value-at-Risk

WFE – World Federation of Exchanges

Statement of Copyright

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Chapter 1 — Introduction: Antecedent Matters

1.1. Prefatory Thoughts

The Nigerian financial markets are witnessing momentous legal and regulatory changes. Nowhere have these changes been more extensive that the derivatives segment. On 23 December 2019, the SEC (the apex regulator in the Nigerian capital markets)[1] issued the *SEC Derivatives and CCP Rules*. This regulation sets out (among other things) important provisions on the regulation of derivatives, the trading of these products, relevant registration requirements (for the products themselves, market participants, and market infrastructures), risk management, clearing, and settlement in the Nigerian capital markets. Added to this, on 7 August 2020, seeking to make the country's business and operating environment more friendly,[2] the President of the Federal Republic of Nigeria, Muhammadu Buhari, signed the CAMA 2020 into law.

This statute is especially notable as it represents the first wholesale review of the country's company law following a thirty-year hiatus.[3] In enacting this statute, one of the major legislative objectives was reform of the country's derivatives regulatory framework, an aim which had long been a regulatory priority.[4] Nigerian lawmakers and regulatory actors thought they had completed the job after they transplanted, in *toto*, boilerplate derivatives reform language into the CAMA 2020.[5] This work will show, among other things, that this is far from the case.[6]

As a starting point, one might ask why these financial instruments continue to elicit interest well over ten years following the GFC (after Warren Buffett referred to them, rather derisively, as "financial weapons of mass destruction"[7]).[8] Against the backdrop of the recent collapse of Archegos

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[1] Pursuant to the ISA 2007, the SEC regulates the Nigerian capital markets *via* the following tools as it relates to infrastructures, intermediaries, and securities: (a) registration; (b) inspection; (c) surveillance; (d) investigation; and (e) enforcement. See "What We Do", available at: <https://sec.gov.ng/about/what-we-do/>.

[2] See "Doing Business in Nigeria", available at: <https://www.worldbank.org/en/country/nigeria/overview#1>.

[3] It is notable that an important jurisdiction such as Nigeria did not review its company law immediately after the GFC. The relevance of this is discussed in chapter 6.

[4] Iheanyi Nwachukwu, 'Nigeria's SEC Says Derivatives Trading One of its Top Priorities in 2020' *BusinessDay* (6 January 2020) <https://businessday.ng/markets/article/nigerias-sec-says-derivatives-trading-one-of-its-top-priorities-in-2020/> accessed 28 February 2020.

[5] The *2006 ISDA Model Netting Act* was the boilerplate derivatives reform language transplanted into Nigerian law.

[6] This is a core argument of this work. See chapters 3, 4, and 5.

[7] Warren Buffet Letter to Berkshire Hathaway Inc Shareholders (dated 21 February 2003) <https://www.berkshirehathaway.com/letters/2002pdf.pdf> accessed 11 April 2020.

[8] A historian has even referred to derivatives as the "crystal meth of finance". See Thomas Bass, 'Derivatives: The Crystal Meth of Finance' *Huffington Post* (6 May 2009) <https://www.huffpost.com/entry/derivatives-the-crystal-m_b_195221> accessed 28 February 2020.

Capital Management due to overleveraged swap transactions,[9] one might yet wonder why these still "misunderstood"[10] financial instruments would be of interest in a developing country such as Nigeria, famous more for its crude oil.[11] The answer is connected, importantly, to the role that derivatives play in financial markets in general.[12] As noted, the development of the Nigerian derivatives market has long been a regulatory priority. *Why*, one might ask. The role these instruments can play in a developing country's financial markets has become well understood and desired in these jurisdictions.[13] Specifically, derivatives can play a constructive role in financial markets in that they facilitate risk reduction/redistribution, enhance price discovery, and aid with price stabilisation.[14] For these reasons,[15] developing countries such as Nigeria are keen to leverage these financial instruments in the bid to enhance and deepen their financial markets and, by extension, their economies.[16] As will be seen in chapters 2 and 3, Nigeria, in particular, employs derivatives as a tool to manage foreign currency pressures.[17]

As a precondition to the realisation of these benefits, however, several factors do need to be in place in a local market.[18] First, there must be commonplace market sophistication; after all derivatives

[9] Matt Phillips, 'Investment Firm's Collapse Put Unseen Risks on Full Display' *NY Times* (31 March 2021) accessed 31 March 2021 <https://www.nytimes.com/2021/03/31/business/archegos-stock-market-swaps.html>.
[10] Dan Awrey, 'Split Derivatives: Inside the World's Most Misunderstood Contract' [2019] 36(2) Yale Journal on Regulation 495-574.
[11] See "OPEC – Nigeria Facts and Figures", available at: <https://www.opec.org/opec_web/en/about_us/167.htm>.
[12] For a fulsome exploration of the merits and demerits of derivatives, see chapter 2 at 2.10.1 and 2.11.1.
[13] See, for example, "Societe Generale: Opening Up Derivative Locks in Ghana and Mongolia", available at: <https://wholesale.banking.societegenerale.com/en/insights/news-press-room/news-details/news/opening-derivative-locks-ghana-and-mongolia/>; Loretta Martikian, Georgian Parliament Passes Derivatives Law Supported by EBRD (ERDB January 2020) <https://www.ebrd.com/news/2020/georgian-parliament-passes-derivatives-law-supported-by-ebrd.html>; and Tarun Bajaj and Shashank Saksena, 'Bilateral netting, by law' *The Hindu BusinessLine* (21 October 2020) <https://www.thehindubusinessline.com/opinion/bilateral-netting-by-law/article32910885.ece> accessed 26 January 2021.
[14] More is said on this in chapter 2. See, also, Donald Lien and Mei Zhang, 'A Survey of Emerging Derivatives Market' [2008] Emerging Markets Finance & Trade 44(2) 39-69, George Allayannis and Eli Ofek, 'Exchange Rate Exposure, Hedging, and the Use of Foreign Currency Derivatives' [2001] Journal of International Money and Finance 20 273-296, and Hassan Tanha and Michael Dempsey, 'Derivatives Usage in Emerging Markets Following the GFC: Evidence from the GCC Countries' [2017] Emerging Markets Finance and Trade 53 170-179.
[15] Paul McBride, 'The Dodd-Frank Act and OTC Derivatives: The Impact of Mandatory Central Clearing on the Global OTC Derivatives Market' [2010] 44(4) 1077-1122 ("When used responsibly, derivatives serve vital liquidity and price discovery functions and permit market participants to hedge against unwanted risk.")
[16] Javier Blas, 'Uncovering the Secret History of Wall Street's Largest Oil Trade' *Bloomberg* (April 2017) <https://www.bloomberg.com/news/features/2017-04-04/uncovering-the-secret-history-of-wall-street-s-largest-oil-trade> accessed 22 August 2019 ("For its part, Mexico has shown a Wall Street-style wizardry in trading oil. It usually makes money on its hedges—sometimes a lot of money, as in 2008-09").
[17] See also Peter Egwuatu, 'FG Can Leverage Derivative Market to Hedge Against Oil Price Volatility' *Vanguard* (6 April 2021) accessed 7 April 2021 <https://www.vanguardngr.com/2021/04/fg-can-leverage-derivative-market-to-hedge-against-oil-price-volatility-fmdq/>.
[18] See generally Deutsche Borse Group, The Global Derivatives Market: An Introduction (2008) <https://www.math.nyu.edu/faculty/avellane/global_derivatives_market.pdf>.

are complex instruments.[19] Second, there must be appropriate market-wide technology and capacity. Third, there must be robust market infrastructures (especially clearing platforms).[20] Finally, there must be a clear legal and regulatory framework designed to engender legal certainty. In theory, this fourth point—a clear legal and regulatory framework—is a uniquely important factor and is especially relevant for the establishment of a vibrant, liquid, and deep derivatives market. Similarly, it is also relevant to/for the maintenance of order, transparency, and robust risk management in a derivatives market.[21] Where it is unclear that an act is legal, there can be no comfort, no matter how innovative or well-intended such an act might be. Relative to Nigeria, this is the main focus of this work.

It is important to note at this point that a robust legal and regulatory framework should not be mistaken, however, for a transplanted collection of rules aimed at simply allowing for unfettered markets-influenced contrivance in the name of free markets. This dissertation sounds this warning because a review of contemporary financial regulation literature in general reveals that this happens to be the analytical framework often applied when attempting to reform regulatory schemes in developing economies such as Nigeria. If anything, what the GFC has shown us is that conventional financial theory, which lionises free markets, inflexible enforcement of property (and contractual) rights in the bid to advance private risk taking, *laissez-faire* approaches to regulation,[22] and the subjugation of all other public policy considerations,[23] is not socially tenable.[24]

This failure of global financial regulation to satisfactorily grapple with the polychromatic (and paradoxically conflicting) combination of complexity[25] and innovation, financialisation,[26] financial nationalism,[27] and, more recently, Brexit in Europe further makes clear that perfect market assumptions hitherto advanced by orthodox financial economic theories—such as the modern portfolio theory, the Modigliani and Miller capital structure irrelevancy principle, the capital asset

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[19] See, in general, Lucia Quaglia, *The Politics of Regime Complexity in International Derivatives Regulation* (Oxford University Press 2020).
[20] Ibid at p. 60.
[21] The frame of optimally ordered derivatives regulatory framework conceptualised and applied throughout this work is captured below at 1.2.
[22] Martin Brownbridge and Colin Kirkpatrick, 'Financial Regulation in Developing Countries' [2000] 37(1) The Journal of Development Studies 1-24.
[23] Alan Greenspan, 'The Role of Capital in Optimal Banking Supervision and Regulation' [1998] Federal Reserve Bank of New York Policy Review 165-166.
[24] Financial Crisis Inquiry Commission, *Final Report of the National Commission on the Causes of the Financial Crisis in the United States* <https://www.govinfo.gov/content/pkg/GPO-FCIC/pdf/GPO-FCIC.pdf> accessed 12 April 2020 ("Deregulation went beyond dismantling regulations; its supporters were also disinclined to adopt new regulations or challenge industry on the risks of innovations.")
[25] Dan Awrey, 'Complexity, Innovation, and the Regulation of Modern Financial Markets' [2012] 2(2) Harvard Business Law Review 236-294.
[26] Malcolm Sawyer, 'What is Financialisation' [2013] 42(4) Internal Journal of Political Economy 5-18.
[27] Federico Lupo-Pasini, 'The Rise of Nationalism in International Finance: The Perennial Lure of Populism in International Financial Relations' [2019] 30(1) Duke Journal of Comparative & International Law 93-141.

pricing model, and the efficient market hypothesis, for example—can simply no longer be accepted without question. The social costs of financial crises render the unchallenged acceptance of these concepts too politically toxic. What this means, in effect, is that some broad notion of public good has now assumed great importance in financial regulation.[28]

An exploration of the post GFC reform landscape shows that the imperatives which now underpin financial regulatory reform are informed by concerns relating to investor protection, institutional regulation, and macro-prudential regulation, concepts which still draw their roots from arguments entrenched in traditional scholarly considerations of information asymmetry, market externalities, and theories of financial regulation—all of which are relevant in (and to) Nigerian derivatives (and financial) regulation.[29] All of these are referred to broadly in global financial regulation parlance, rightly, as public good.[30] While this dissertation draws from some of these themes and debates,[31] still, such a theoretical frame alone is unhelpful when applied to attempts to reform legal and regulatory compacts in developing economies, without clinical/deliberate rigour, because they do not contemplate the nuances, politics, and peculiarity of objectives or circumstances which might inform (or impede) regulatory reform in these countries. A ready example is lack of capacity.[32] Another example would be the legacy of colonisation bequeathing complex legal systems to developing countries (such as in Nigeria or South Africa). Another example would be corruption.

Crucially, in these jurisdictions, public good in financial regulation extends beyond merely supplying financial stability and veers into spheres like development.[33] Accordingly, legislative and regulatory actors in these jurisdictions will often try to see how they can employ regulation as a tool to stimulate financial market and/or economic development. In designing a financial regulatory system in developing economies, therefore, it is important to keep this fine point in mind.[34] Consequently, there must be a manifest, clinical, and thorough understanding of a local legal system

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[28] See, in general, Selin Sayek and Fatma Taskin, 'Financial Crises: Lessons from History for Today' [2014] 29(79) Economic Policy 447–493; Gary Gorton, 'Financial Crises' [2018] 10(1) Annual Review of Financial 43-58; Roy Allen, *Financial Crises and Recession in the Global Economy* (Edward Elgar Publishing 2016); and Marziyeh Askari, Homayoun Shirazi, and Keivan Aghababaei Samani, 'Dynamics of Financial Crises in the World Trade Network' [2018] Physica A 164-169.
[29] John Cioffi, "After the Fall: Regulatory Lessons from the Global Financial Crisis" in David Levi-Faur (eds), Handbook on the Politics of Regulation (Cheltenham: Edward Elgar 2011) 642.
[30] Masaaki Shirakawa, Governor of the Bank of Japan, 'International Financial Stability as a Public Good' (Keynote Address at a High-Level Seminar Co-Hosted by the Bank of Japan and the IMF, Tokyo, 14 October 2012) <https://www.boj.or.jp/en/announcements/press/koen_2012/data/ko121014a.pdf>.
[31] For example, see discussions on transplantation and transnationalisation in chapter 4.
[32] Notably, this is a point which is relevant in this work. See chapters 4, 5, and 6.
[33] Fiona Haines, *The Paradox of Regulation: What Regulation Can Achieve and What It Cannot* (Cheltenham: Edward Elgar 2011) and Justin O'Brien, 'Snaring Leopards: Tracking the Efficacy of Financial Regulatory Reform in the Aftermath of Crisis' [2010] 12(2) Oregon Review of International Law 213-244.
[34] Swati Ghosh, *East Asian Finance: The Road to Robust Markets* (World Bank 2006) <https://openknowledge.worldbank.org/bitstream/handle/10986/7063/372640EAP0East101OFFICIAL0USE0ONLY1.pdf?sequence=1&isAllowed=y>.

before attempting to inflow reform. If nothing else, one thing that this work highlights is that, in making the principal arguments outlined herein, this concept of public good is very much understood and internalised into the research and the output documented herein. In synthesising the conclusions in chapter 3, this study explores these theoretical points in more detail.

All of these understood, turning, then, to the substantive derivatives regulatory framework in Nigeria,[35] and accepting that the existence of an optimally crafted legal and regulatory regime will enhance the development of its derivatives markets, it will probably be incontrovertible to proceed by submitting that there is a distinct lack of clarity as to, firstly, how derivatives *are* regulated in Nigeria and, secondly, rather more importantly, how they *ought to be* regulated.[36] The next point, though, one which may prove somewhat more controversial, is that this confusion (as to how derivatives ought to be regulated) confounds market stakeholders and participants, from intermediaries to investors, to legal practitioners, and regulators. *Why would one make such an assertion*? Nothing typifies this confusion and lack of clarity more than the outcome of the recent attempts at derivatives regulatory reform. This outcome is the continuing failure to cure the fractures in the Nigerian derivatives regulatory framework. Notably, this continuing failure is why this work argues that the resultant framework is a false start and stands as wholly insufficient.[37] For example, despite recent attempts at reform, the term 'derivative' remains imprecisely defined in Nigerian statutory law, regulatory and jurisdictional conflict continues to impede the effectiveness of the institutional structure of the regulatory framework, legal uncertainty as to the efficacy of netting and collateral arrangements persist, and, finally, fissures exist in the clearing end of the derivative trading value chain. The exploration of this situation (and construction of potential solutions to these issues) is the focus of this work.

As will be demonstrated throughout the course of this work, recent derivatives reform in Nigeria only closes some fractures in the regulatory scheme, many others persist, despite what stakeholders might think.[38] Indeed, one can argue that additional fractures have been triggered by recent reform. This situation has certainly not been helped by the fact that, before the present enquiry, there has been no attempt to analyse or systemise the existing, haphazard, patchwork of Nigerian derivatives regulation, practice, and law into any clear construct with a view to dimensioning and addressing

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[35] In this work, the phrase '*derivatives regulatory framework*' used as the subject of this research is used as a proper noun.

[36] The interest in conducting the present research itself stems from the researcher's practice experience as a finance lawyer, upon contact with derivatives regulation in the subject jurisdiction.

[37] See chapter 3 from 3.2 to 3.3.

[38] Deji Elumoye and Chuks Okocha, 'Senate Passes CAMA Amendment Bill' *ThisDay* (11 March 2020) <https://www.thisdaylive.com/index.php/2020/03/11/senate-passes-cama-amendment-bill/> accessed 11 November 2020.

either of the fundamental questions as to how derivatives are regulated in the country and how they ought to be.[39]

1.2. Optimally Ordered Regulatory Framework and Appurtenant Infrastructure

What then might a robust derivatives regulatory framework look like? Before proceeding further into this work, it is necessary to tackle this (especially in the post GFC reform era) as this helps frame the context against which the principal arguments and recommendations in this dissertation are made.[40] At the global level, following the GFC, the much-discussed 2009 Pittsburgh Summit of the G20 produced a collection of reforms for the global derivatives markets which G20 countries have been assiduously attempting to implement (with varying degrees of success, of course).[41] This is the conceptual starting point. Specifically, at the summit, it was agreed that:

> "[a]ll standardized OTC derivative contracts should be traded on exchanges or electronic trading platforms, where appropriate, and cleared through central counterparties [clearinghouses] by end-2012 at the latest. OTC derivative contracts should be reported to trade repositories. Non-centrally cleared contracts should be subject to higher capital requirements. We ask the FSB and its relevant members to assess regularly implementation and whether it is sufficient to improve transparency in the derivatives markets, mitigate systemic risk, and protect against market abuse. "[42]

Figure 1.1. which follows provides an overview of the status of reform implementation across all FSB jurisdictions as of October 2020.[43]

Figure 1.1.: Summary of jurisdictional progress of OTC derivatives market reforms as at October 2020

[39] Research on the legal and regulatory scheme of the Nigerian financial market tends to focus on either equity markets or banking regulation. Derivatives regulation is a recent phenomenon in Nigerian financial regulation.
[40] Chapter 3 captures these themes comprehensively.
[41] See IOSCO, Implementation Report: G20/FSB Recommendations related to Securities Markets (November 2017) <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD585.pdf> accessed 3 January 2021.
[42] G20 Leaders' Statement, The Pittsburgh Summit, 24–24 September 2009.
[43] G20 nations are members of the FSB. See "Members of the FSB", available at: <<https://www.fsb.org/about/organisation-and-governance/members-of-the-financial-stability-board/>.

		Trade reporting	Central clearing	Interim capital	Final capital	Margin	Platform trading
Argentina	AR	Blue	1	Blue	Blue	1	3
Australia	AU	Blue	Blue	Blue	Blue	Blue	Blue
Brazil	BR	Blue	Blue	Blue	Blue	Blue	1
Canada	CA	Blue	Blue	Blue	Blue	Blue	2
China	CN	Blue	Blue	Blue	3	1	3
European Union	EU[a]	Blue	Blue	Blue	3	Blue	Blue
Hong Kong, SAR	HK	Blue	Blue	Blue	3 (+)	Blue	Blue
India	IN	Blue	3	Blue	3	2	3
Indonesia	ID	Blue	3	Blue	Blue	2 (+)	3
Japan	JP	Blue	Blue	Blue	3	Blue	Blue
Republic of Korea	KR	Blue	Blue	Blue	Blue	Blue	1
Mexico	MX	Blue	Blue	Blue	1	2	Blue
Russia	RU	Blue	3 (+)	Blue	2	1	2
Saudi Arabia	SA	Blue	1	Blue	Blue	Blue	1
Singapore	SG	Blue	Blue	Blue	3	Blue	Blue
South Africa	ZA	3	3	Blue	2	3 (+)	1
Switzerland	CH	Blue	Blue	Blue	Blue (+)	Blue	Blue
Turkey	TR	Blue	1	Blue	2	1	1
United Kingdom	UK[b]	Blue	Blue	Blue	3	Blue	Blue
United States	US	Blue	Blue	3	3 (+)	Blue	Blue
				Totals			
1		0	3	0	1	4	5
2		0	0	0	3	3	2
3		1	4	1	12	1	4
Blue		23	17	23	8	16	13
(+)		0	1	0	3	2	0

(+) indicates positive change in reported implementation status from end-September 2019. [a] The EU includes five FSB member jurisdictions (France, Germany, Italy, Netherlands, Spain), which are counted individually in the totals. The UK left the EU on 1 February 2020 and is no longer an EU member state. [b] In accordance with the Withdrawal Agreement, the EU regulatory framework continues to apply during the transition period, which is due to end on 31 December 2020.

Legend:

Jurisdiction codes					
AR	Argentina	IN	India	SG	Singapore
AU	Australia	ID	Indonesia	ZA	South Africa
BR	Brazil	JP	Japan	CH	Switzerland
CA	Canada	KR	Republic of Korea	TR	Turkey
CN	China	MX	Mexico	UK	United Kingdom
EU	European Union	RU	Russia	US	United States
HK	Hong Kong SAR	SA	Saudi Arabia		

Red	No existing authority to implement reform and no steps taken to adopt such authority.
1	*All reform areas:* **Legislative framework** or **other authority** is **in force** or has been published for consultation or proposed.
2	*Trade reporting:* Legislative framework or other authority is in force and, with respect to at least some transactions, **standards / requirements** have been **published for public consultation** or proposal. *Central clearing and platform trading:* Legislative framework or other authority to implement reform is in force and, with respect to at least some transactions, **standards / criteria for determining** when transactions should be centrally cleared / platform traded have been **published for public consultation or proposal**. *Capital and margins for non-centrally cleared derivatives:* Legislative framework or other authority is in force and, with respect to at least some transactions, **standards / requirements** have been **published for public consultation or proposal**.
3	*Trade reporting:* Legislative framework or other authority is in force and, with respect to at least some transactions, public **standards / requirements have been adopted**. *Central clearing and platform trading:* Legislative framework or other authority is in force and, with respect to at least some transactions, public **standards / criteria for determining** when products should be centrally cleared / platform traded **have been adopted**. *Capital and margins for non-centrally cleared derivatives:* Legislative framework or other authority is in force and, with respect to at least some transactions, public **standards / requirements have been adopted**.
Blue	*Trade reporting:* Legislative framework or other authority is in force and, with respect **to over 90% of transactions, standards / requirements are in force**. *Central clearing and platform trading:* Legislative framework or other authority is in force and, with respect **to over 90% of transactions, standards / criteria for determining** when products should be centrally cleared / platform traded **are in force**. An appropriate authority regularly assesses transactions against these criteria. *Capital for non-centrally cleared derivatives:* Legislative framework or other authority is in force and, with respect **to over 90% of transactions, standards / requirements** are **in force**. *Margins for non-centrally cleared derivatives:* Legislative framework or other authority is in force and, with respect **to over 90% of the transactions** covered consistent with the respective WGMR phase in periods, **standards / requirements are in force**.

Source: FSB, OTC Derivatives Market Reforms: Note on implementation progress for 2020 (2020) p. 2.

In relation to central clearing-related reforms, Figure 1.2. which follows shows that, as of October 2020, seventeen FSB member jurisdictions have comprehensive standards for mandatory central clearing in force. The global regulatory posture to central clearing is instructive and is discussed in further detail below. (For the purpose of this study, it goes to no effect that the reforms principally concern(ed) OTC derivatives, as the type of the derivative does not matter from the perspective of a CCP.)

Figure 1.2.: Status of central clearing regulatory implementation

	Q3 2019	Q4 2019	Q1 2020	Q2 2020	Q3 2020	*Q4 2020*	*H1 2021*	*H2 2021*
AR	1	1	1	1	1	1	1	1
AU	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
BR	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
CA	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
CN	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
EU[(a)]	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
HK	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
IN	3	3	3	3	3	3	3	3
ID	3	3	3	3	3	3	3	3
JP	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
KR	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
MX	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
RU	2	2	3	3	3	3	3	3
SA	1	1	1	1	1	1	1	1
SG	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
ZA	3	3	3	3	3	3	3	3
CH	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
TR	1	1	1	1	1	1	2	Blue
UK[(b)]	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
US	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue

Source: FSB, OTC Derivatives Market Reforms: Note on implementation progress for 2020 (2020) p. 16.

What these reforms have helped build, relatively speaking, is a robust and consistent global regulatory framework covering, among other things, financial market participants (such as banks and hedge funds), gatekeepers (in particular, credit rating agencies), the shadow banking system, and (OTC) derivatives markets. With the FSB-issued *Implementation and Effects of the G20 Financial Regulatory Reforms* finding recently that "[the] G20 reforms that followed the 2008 crisis have served the financial system well"[44] (notwithstanding the effects of COVID-19 on the global financial system), the above-outlined imperatives (the "**Pittsburgh Summit commitments**") are employed in this study as the foundational outline which ought to exist in any robust derivatives regulatory framework.[45]

Added to the Pittsburgh Summit commitments, there are other unique parameters which are especially relevant for developing countries, such as Nigeria.[46] The view in this study is that the

[44] FSB, *Implementation and Effects of the G20 Financial Regulatory Reforms* (2020) <https://www.fsb.org/wp-content/uploads/P131120-1.pdf> accessed 28 December 2020.
[45] See Quaglia at n 21.
[46] These additional parameters will not have been crucial to consider at fora like the 2009 Pittsburgh Summit because G20 nations have largely inculcated these parameters into their regulatory frameworks. For developing countries, however, they remain vital. See, in general, Kristin Johnson, 'Governing Financial Markets: Regulating Conflicts' [2013] 88(1) Washington Law Review 185-244; Bruno Biais, Florian Heider, and Marie Hoerova, 'Clearing, Counterparty Risk, and Aggregate Risk' [2012] 60(2) IMF Economic Review 193-222; Arthur Duff and David Zaring, 'New Paradigms and Familiar Tools in the New Derivatives

parameters set out in the paragraph which follows are useful for Nigeria to inculcate and implement if it is to develop its regulatory framework. Even though the country is not currently a G20 nation, ultimately, full implementation of relevant G20 commitments is a non-negotiable imperative for any country which desires to be internationally competitive in the current global context. Before Nigeria can reach this point, however, it is crucial that fractures relating to non-G20 issues be deconstructed and cured as a fundamental starting point. It is these set of fractures that are principally explored in this work.[47]

The foregoing understood, then, the first parameter would be clear and appropriate regulation, with able and well-coordinated financial market regulators, in addition to strong SROs.[48] The second parameter would be that market participants which engage in derivative transactions have to be appropriately licenced and regulated to ensure the entrenchment of robust risk management.[49] Connected to this second point, notably, is the concept of netting, which is one of the two most important ways to manage financial risks associated with derivatives markets.[50] Even before the GFC, contemporary regulatory approaches and theories on derivatives regulation have long recognised that the efficiency/efficacy of derivative transactions would be undermined if market participants cannot effectuate netting to address counterparty credit risk without exposing themselves to legal uncertainty[51] and/or delay in a counterparty's insolvency proceeding.[52] This means there is a requirement for statutory protection of netting arrangements (as part of derivatives and collateral agreements). As will be seen in chapter 3 and chapter 4, the concept of netting is one that the Nigerian derivatives regulatory regime is still grappling with. Finally, the second most important way to manage risk in derivatives markets is to reduce exposure by employing central clearing entities[53] (i.e., CCPs) which interpose themselves between transaction counterparties to derivative contracts that are traded in one or more markets.[54] Operationally, the functions of a CCP

Regulation' [2013] 81(3) George Washington Law Review 677-706; and Colleen Baker, 'Regulating the Invisible: The Case of Over-the-Counter Derivatives' [2010] 85(4) Notre Dame Law Review 1287-1378.

[47] See chapters 3, 4, and 5.

[48] Jim Rossi and Jody Freeman, 'Agency Coordination in Shared Regulatory Space' [2012] 125(5) Harvard Law Review 1134-1191.

[49] Joanne Braithwaite and David Murphy, 'Get the Balance Right: Private Rights and Public Policy in the Post-Crisis Regime for OTC Derivatives' [2017] 12(4) Capital Markets Law Journal 480-509.

[50] See chapter 2 at 2.7. for a comprehensive discussion of netting.

[51] Robert Bliss and George Kaufman, 'Derivatives and Systemic Risk: Netting, Collateral, and Closeout' [2005] Federal Reserve Bank of Chicago Working Paper 2005-03.

[52] Research shows that every year netting reduces the gross mark-to-market value of outstanding derivative transactions across all asset classes by over 80 per cent. See David Mengle, 'The Importance of Close-Out Netting' [2010] ISDA Research Notes No 1.

[53] Craig Pirrong, The Economics of Central Clearing: Theory and Practice (2011) (ISDA Discussion Paper Series No. 1) 12 <https://www.isda.org/a/yiEDE/isdadiscussion-ccp-pirrong.pdf> accessed 26 December 2018.

[54] Colleen Baker, 'Regulatory Reforms and Unintended Collisions: The Case of the Volcker Rule and the Over-the-Counter Derivative Markets' [2015] 10(4) Capital Markets Law Journal 433-446 ("Clearinghouses

are (a) trade confirmation, (b) position/exposure management, (c) delivery management, (d) discharging multilateral netting functions, (e) membership management, (f) risk management and (g) default management. This means that legal questions as to the robustness of CCPs' operations in Nigeria, their risk management practices, and their default management processes (among other factors) must be thoroughly satisfied.[55]

In this dissertation, focus is expended on the clearing component in the post-trade value chain (i.e., CCPs); these FMIs are conceptualised herein as "appurtenant infrastructure".[56] *Why does this work take this approach*? Importantly, it does so because post the GFC, there has been an unambiguous global regulatory shift towards central clearing (and implementing margin requirements for non-cleared derivatives)[57] with the principal objective being the reduction of counterparty credit risk in derivative (and financial) markets. This is so because CCPs decrease interconnectedness between market participants while mitigating systemic risk by lowering the likelihood of contagious defaults which might spread from one financial market counterparty to another.[58] To illustrate, on 15 September 2008 when Lehman Brothers Holdings Inc filed for bankruptcy, it was party to over 900,000 derivative transactions, with an estimated notional value of $35 trillion.[59] Unsurprisingly, global financial markets panicked[60] and were fearful of a domino effect at the time as "no one knew who was holding the bag".[61] Following the GFC, global reform ensured that, going forward, CCPs help prevent panic by, effectively, having market participants insure their derivative transactions *via* initial margin and variation margin. CCPs therefore help see to it that derivatives (and financial) markets (in general) are safe, vibrant, liquid, and deep.[62] While these issues are discussed more fulsomely in chapter 2, Figure 1.3., which follows, depicts roughly how CCPs work.

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are the centrepiece of both domestic and international public sector reforms to OTC derivative markets.") See also chapter 2 for a comprehensive discussion on clearing entities.

[55] Joanne Braithwaite and David Murphy, Got to be Certain: The Legal Framework for CCP Default Management Processes [2016] Bank of England Financial Stability Paper No 37 <https://www.bankofengland.co.uk/financial-stability-paper/2016/got-to-be-certain-the-legal-framework-for-ccp-default-management-processes> accessed 16 March 2020.

[56] This is the conceptualisation used in reference to CCPs and (central) clearing throughout.

[57] Implementing margin requirements is not the focus herein, however, to be clear.

[58] See chapter 2 at 2.8.

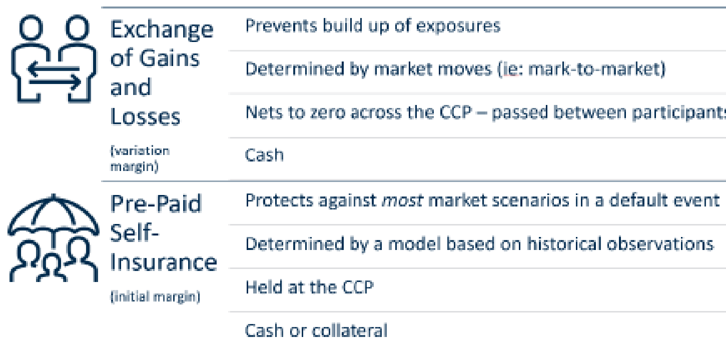
[59] Michael Fleming and Asani Sarkar, 'The Failure Resolution of Lehman Brothers' [2014] 40(3) Liberty Street Economics Federal Reserve Bank of New York <https://libertystreeteconomics.newyorkfed.org/2014/04/the-failure-resolution-of-lehman-brothers-.html> accessed 6 January 2020.

[60] Rosalind Wiggins and Andrew Metrick, 'The Lehman Brothers Bankruptcy G: The Special Case of Derivatives' [2019] 1(1) Journal of Financial Crises 151-171.

[61] Christina Segal-Knowles, Executive Director, Financial Market Infrastructure Directorate, BOE, 'Lessons from the Pandemic: Has the Simpler Post-2008 Financial System Held Up? And Where Do We Go from Here?' (speech at Official Monetary and Financial Institutions Forum, 29 January 2021). <https://www.bankofengland.co.uk/-/media/boe/files/speech/2021/january/has-the-simpler-post-2008-financial-system-held-up-speech-by-christina-segal-knowles.pdf?la=en&hash=1D5368CE3851806186CCC076627CBC8461914606>

[62] Hence the conceptualisation 'appurtenant infrastructure' in this work.

Figure 1.3.: CCP margin protects against a Lehman-like scenario



Source: Christina Segal-Knowles, Executive Director, Financial Market Infrastructure Directorate, BOE, 'Lessons from the Pandemic: Has the Simpler Post-2008 Financial System Held Up? And Where Do We Go from Here?' (speech at Official Monetary and Financial Institutions Forum, 29 January 2021) <https://www.bankofengland.co.uk/-/media/boe/files/speech/2021/january/has-the-simpler-post-2008-financial-system-held-up-speech-by-christina-segal-knowles.pdf?la=en&hash=1D5368CE3851806186CCC076627CBC8461914606>

Unmistakeably, this is a regulatory understanding and approach which has taken hold in Nigeria as well.[63] It is thoroughly understood and internalised locally that robust clearing infrastructure is pertinent to a vibrant derivatives regulatory framework (and market).[64] In employing appurtenant infrastructure as an analytical tool in this work, therefore, focus is placed on the extent to which extant Nigerian law and regulation (a) engenders legal certainty and (b) accentuates transactional efficacy.

Another word of caution is important at this point. It must be noted that this work does not extend the conceptualisation of 'appurtenant infrastructure' to central securities depositories. Crucially, derivatives are not maintained in these types of infrastructures, as are traditional securities. So, while an important financial market infrastructure, central securities depositories are largely irrelevant to the core themes of this work and its principal arguments. Similarly, trading venues or exchanges are largely irrelevant too as they are not regarded as financial market infrastructures

[63] This explains, to illustrate, why the SEC in 2019 issued the *SEC Derivatives and CCP Rules*.

[64] See, generally, Peter Norman, *The Risk Controllers, Central Counterparty Clearing in Globalised Financial Markets* (John Wiley & Sons 2011); Darrell Duffie, 'How Should We Regulate Derivatives Markets?' (25 August 2009) (PEW Financial Reform Project, Briefing Paper No. 5); Simon Firth, *Derivatives: Law and Practice* (London: Sweet & Maxwell 2017); and IOSCO, *Requirements for Mandatory Clearing* (2012) <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD374.pdf>.

under the CPSS-IOSCO Principles.[65] Besides, limited systemic risk is associated with trading venues, if at all.[66]

1.3. Research Questions

To deliver the central theme of this dissertation with as much clarity as is possible, two questions have been formulated. They are:[67]

(1) *What is the existing legal and regulatory framework in Nigeria as it applies to derivatives?*

(2) *How might this framework be improved upon?*

1.4. Principal Arguments

Broadly, two principal arguments are advanced in this dissertation. Firstly, this work argues that the intended effects of recent derivatives reform in Nigeria cannot (and indeed will not) be achieved under current terms.[68] Questioning the strength of such an argument is, of course, reasonable, given that the regulatory scheme in the country has only just been recently reformed. So, *why would this dissertation make such an argument*? It does so because contextual and substantive attention was not paid to the ontology of the local legal and financial system by the draftsmen and relevant regulatory actors in enacting recently transplanted reforms. In other words, this work argues that the transnational flow of reform into Nigerian law is defective. Consequently, we will come to find that opportunities have been lost in the reform process. Chapter 4 tackles these issues.

Secondly, this work argues that the appurtenant infrastructure surrounding the derivatives regulatory framework which is supposed to underpin associated functions in the local derivatives markets (i.e., the clearing spectrum, as explained above)[69] is sub-optimally ordered. This sub-optimal ordering is further accentuated by larger fissures in the institutional structure overarching derivatives (and financial) regulation in the country, as will be confronted in this work. Some

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[65] CPSS-IOSCO Principles at 5 <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD377-PFMI.pdf> accessed 26 December 2018 ("… the term FMI refers to systemically important payment systems, [central securities depositories], [securities settlement systems], [central counterparties], and [trade repositories]. These infrastructures facilitate the clearing, settlement, and recording of monetary and other financial transactions, such as payments, securities, and derivatives contracts (including derivatives contracts for commodities.")

[66] While operationally crucial, they have become even less systemically relevant in light of innovation and technology.

[67] Both questions are addressed in tandem and side-by-side throughout the course of this work.

[68] This extends to legal, statutory, and regulatory terms.

[69] See 1.2. above.

arguments made in this work might be striking, as may be some findings outlined herein, so it calls for urgent reform of the derivatives scheme in Nigeria. For example, this work makes the argument (among others) that the legal status of CCPs in Nigeria is questionable because the regulation providing for their authorisation and regulation is legally impermissible and inconsistent with the peremptory provisions of the ISA 2007, meaning that pressing *ultra vires* fears loom large.[70] Nigerian law is clear as to what happens in *ultra vires* scenarios: [71] any action taken outside the powers conferred by a statute will be null and void.[72] Frighteningly, regulatory actors in the country (particularly the SEC and the CBN) are totally oblivious to this state of play (among many others).

1.5. Relevance of Research

A consideration of the research questions formulated above might trigger a further question: *what is the (practical) relevance of the present research*? As already stated, countries like Nigeria are trying desperately to enhance and deepen their financial markets and their broader economic compacts. It is also already well understood that derivatives present a useful deployable tool in this respect.[73] Since 2016, the country has been rather adept at using derivatives as a tool to ameliorate foreign exchange demand in support of monetary policy.[74] As discussed in chapter 2, when it comes to addressing financial market risks and improving liquidity in Nigeria, derivatives are extremely essential. No doubt, this explains why Nigeria took steps to close fractures in its legal and regulatory framework.

Before the present enquiry, what had been less well understood were the exact contours of the regulatory framework, how these financial instruments were regulated, and how they ought to be regulated to help effect much-desired derivatives (and financial market) development.[75] The generation of knowledge to help advance an understanding of these issues is exactly why this

[70] Joanne Braithwaite, 'Thirty Years of *Ultra Vires*: Local Authorities, National Courts and the Global Derivatives Markets' [2018] 71(1) Current Legal Problems 369–402.
[71] See *CBN v Igwillo* (2007) JELR 46511 (SC), where the court stated: "Any action taken outside the powers conferred by the statute or regulations made thereof will be *ultra vires*, null and void."
[72] See also *Psychiatric Hospital Management Board v Ejitagha* (2000) JELR 44019 (SC), where the court stated: "A public body or authority invested with statutory powers must act within the law and take care not to exceed or abuse its power. It must keep within the limits of the authority committed to it."
[73] Ghosh (n 38) at 149 ("Derivatives—developed within an appropriate framework of solid product design, regulation, and sound market infrastructure—can play a very important role in allowing market participants to manage and transfer risks to those better able and willing to bear them").
[74] FMDQ, CBN, FMDQ Launch Naira-settled OTC FX Futures Market (28 June 2016) <https://www.fmdqgroup.com/cbn-fmdq-launch-naira-settled-otc-fx-futures-market/> accessed 6 January 2020.
[75] This lack of understanding is one of the premises for the central argument being made in this work that the intended effects of recent derivatives reform in the country will not be achieved under current terms, as contextual and substantive attention was not paid to the ontology of the local legal and financial system in enacting recently transplanted reforms.

research is relevant. Without the benefit of the present research, the transplantation of boilerplate legal propositions will simply deepen regulatory confusion instead of helping create solutions to the problems of sub-optimal regulatory institutional design, legal uncertainty, the weak collateral regime, and lack of clarity as to settlement finality in the Nigerian derivatives markets.[76] Further, clarity as to how jurisdictional conflicts might be resolved between financial market regulatory actors, default management upon the failure of market participants, and how these issues interrelate with domestic insolvency law might not be achieved. What is more, challenges which are posed by the sheer complexity of these instruments,[77] relevant emerging global issues such as fragmentation,[78] increased concentration risk within CCPs, and how these could present broader market-wide systemic risk[79] (raising questions of moral hazard) might not get the requisite examination through a global analytical framework that is so direly needed in the subject jurisdiction. This study deconstructs and synthesises all the foregoing.

In conclusion, this would be the first work to explore the principal derivatives regulations in Nigeria in any sustained manner.[80] Such a financial law enquiry might, it is humbly submitted, help generate a more fulsome understanding of the extant legal and regulatory framework in Nigeria, relative to other countries. It might also help address issues heretofore identified as it offers proposals for reform.[81]

1.6. Originality and Contribution to Knowledge

This dissertation tackles a regulatory scheme in one of the most important segments of the Nigerian financial market: the derivatives framework. The criticality of the development of the derivatives segment to the financial market and broader economy in this key developing country has already been highlighted.[82] Accordingly, this work is original in three respects.

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[76] See generally Joanna Benjamin, 'The Narratives of Financial Law' [2010] 30(4) Oxford Journal of Legal Studies 787-814.
[77] House of Lords European Union Committee - Tenth Report, 'The Future Regulation of Derivatives Markets: Is the EU on the Right Track?' (HL Paper 93, 31 March 2010).
[78] IOSCO, *Market Fragmentation & Cross-border Regulation* (June 2019) <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD629.pdf>.
[79] Ben Bernanke, Chairman of the Board of Governors of the Federal Reserve System, 'Clearinghouses, Financial Stability, and Financial Reform' (speech at the 2011 Financial Markets Conference, Stone Mountain, Georgia, 4 April 2011) <https://www.federalreserve.gov/newsevents/speech/bernanke20110404a.htm>.
[80] An attempt was made fairly recently to explore legal regulation in the Nigerian capital markets; however, this did not at all touch upon derivatives. See Okiemute Akpomudje, 'Legal Regulation of the Capital Market in Nigeria: Analysis and Prospects for Reform' (PhD thesis, Lancaster University 2017).
[81] See chapter 6.
[82] See above at 1.2.

Firstly, this work offers the first representative exploration (and documentation) of the derivatives regulatory scheme in Nigeria, where clarity has been hitherto limited, situating what is Nigerian derivatives law within the broader field of international financial law. *Secondly*, it formulates an analytical framework designed to enhance understanding as to how financial regulatory reform should be pursued in these kinds of jurisdictions. For the purposes of this work, the analytical parameters have been developed specifically to ensure clarity and consistency of analysis. Notably, this framework can be applied to other financial market segments in these kinds of jurisdictions where the pursuit of reform might be in consideration. *Thirdly*, building on comparative perspectives, it offers points of reform, which, if implemented, will contribute to reordering the regulatory framework, energising the Nigerian derivatives market, and de-risking the broader financial system. In these ways, the present work contributes to the state of knowledge of (Nigerian) financial law specifically and financial regulation in general.

1.7. Structure of Dissertation

Chapter 1, the present chapter, sets out the aim, scope, and provides a summary of this research. It articulates the key research questions and themes, the principal arguments advanced in this work, and the methodology which has been adopted in conducting the research. It also outlines the practical relevance and utility of the present research and provides crucial contextual information on the local jurisdiction.

Chapter 2 sets the scene for the rest of the study, outlining the technical frame for this dissertation. It occasions—from a global viewpoint—an understanding of derivatives, describing the history and uses of these devices, their anatomy, how and where they are transacted, and the surrounding framework integral to the ordering of these products in the post GFC reform era. In exploring the concept of appurtenant infrastructure, this chapter focuses on how CCPs are structured, given that two clearing entities—FMDQ Clear Limited[83] and NG Clearing Limited[84]—have recently been licenced in Nigeria.[85] .[86] It further reflects on the state of play, providing insight into the relevant market segments, products traded in the country, and then reveals important data as to market size, among others. In particular, insight is provided into the major derivative product transacted in Nigeria, the OTC FX futures, examining in detail the relevant market structure as it relates to this product. Lastly, the chapter considers the merits and demerits (private and social) of derivatives

[83] See "Who We Are", available at: <https://fmdqgroup.com/fmdqclear/>.
[84] See "Why We Are Here", available at: <https://ngclearing.com/about/why-ng-clearing/>.
[85] Johnson Okafor, 'SEC Grants Approval-in-Principle for CCP Registration' *Punch* (1 October 2020) <https://punchng.com/sec-grants-approval-in-principle-for-ccp-registration/> accessed 28 October 2020.
[86] This point is important in Nigerian derivatives regulation.

and the appurtenant infrastructure associated with derivatives markets. This examination sets out the technical backdrop which helps us appreciate the fractures in the Nigerian regulatory framework which are explored in the rest of the work.

Chapter 3 drills down into the local jurisdiction by exploring the Nigerian derivatives regulatory framework. It proceeds by setting out the state of play and provides insight into the relevant market segments, the products traded in the country, and how the entire market is structured. The chapter then goes on to explore the three extant regulatory sources within the country's derivatives regulatory framework i.e., the SEC, the CBN,[87] and the market infrastructures. The legal and structural fissures which exist within the regulatory framework are explored at this point. These regulatory fractures are systemised into a broad analytical framework, which is further systemised into two sub-analytical frameworks: (a) law and regulation and (b) appurtenant infrastructure. Together, these sub-analytical frameworks subsequently prove to be useful parameters in comparing the Nigerian regime to the UK's and South Africa's in chapter 5.

We take the enquiry deeper in chapter 4, which goes on to explain, against the backdrop of the findings outlined in chapter 3, why the intended effect of recent reform will not (and cannot) be achieved under current terms. To do this, the chapter employs two conceptual tools: transplantation and transnationalisation. This study takes this approach because these are the vehicles which have served to import reform into the Nigerian derivatives regulatory framework. They therefore require specific attention, as they provide useful theoretical context to predicate the argument that the inflow of reform into Nigerian law was/is defective. These two concepts provide insight into the flow of reform into Nigerian law: *how it happened* and *what went wrong*. The chapter then goes on to explore the normative relationship between these concepts before mapping the transnational flow of derivatives reform into Nigerian law. Finally, it develops a theoretical argument as to what has informed reform in Nigeria before going on to develop a theory as to the causes of the failure of the transnational flow of reform into Nigerian law. Together, chapters 2, 3, and 4 help tackle the question as to the nature of the existing legal and regulatory framework in Nigeria.

Chapter 5 compares the derivatives regulatory frameworks in the UK and South Africa with Nigeria's. This is the first instalment in the construction of a response to the second question in this work: *how might this regulatory framework be improved upon*? Employing parameters developed

[87] The CBN is the national reserve bank and is perhaps the most important institution in the Nigerian financial system. It was created pursuant to the *Central Bank of Nigeria Act 1958*, which was then subsequently amended by a number of decrees during the military era. However, at present, the underpinning legislative instrument pursuant to which it exists is the CBN Act 2007, which provides that the CBN shall be a fully autonomous body in the discharge of its functions under the CBN Act 2007, with the objective of promoting stability and continuity in economic management.

in chapter 3, the chapter compares findings from two comparator jurisdictions—the UK and South Africa—against those in Nigeria. As we shall see, both jurisdictions are home to some of the world's most active derivatives markets. The UK and Nigeria share a common law heritage, while South Africa and Nigeria share a proximate geographical and economic relationship in Sub-Saharan Africa. This chapter examines the post GFC regulatory regimes in both jurisdictions to extract lessons, if any, for Nigeria. It is crucial to note that reference is also made in this chapter to the US, as lessons on regulatory conflict are extractable for the CBN and the SEC from the dynamic existent between the US SEC and the CFTC.

Chapter 6 concludes. The chapter sets out a conclusive restatement of the key arguments and findings made in this dissertation and then closes out by outlining reform proposals designed to cure the fractures identified in the course of this research. This is the second and final instalment in the construction of a response to the second question in this work.

1.8. Scope of Dissertation

It is important to be clear on what this dissertation is and what it is not. In making the arguments (and documenting the findings) set out herein, this work focuses on how the regulatory system in Nigeria and the comparator jurisdictions define and situate derivatives within the broader financial regulatory compact, the relevant institutional structure of the overarching regulatory framework, and the clearing component of the derivatives value-chain in these jurisdictions. Chiefly, the objective is to determine the extent to which extant Nigerian law and regulation (a) engenders legal certainty and (b) accentuates transactional efficacy in the derivatives market.

While this work draws extensively from global financial regulation, theories, thought, and law (especially in addressing the second question), it does not purport to be a treatise on global derivatives regulation or contemporary issues in the global regulation arena [88] (such as 'equivalence' for example).[89] Strictly, the focus of this work is the extant law and regulation of derivatives in Nigeria.[90] The issues addressed in this study—though not exhaustive—cover the foundational and fundamental challenges with the extant regulatory framework in Nigeria. In exploring these issues, then, this work focuses on the 'big-picture' derivatives compact in Nigeria. It does not expend focus

[88] Although, it does explore some domestic regulatory issues relevant globally. For example, on 'fragmentation'.
[89] To be sure, themes such as jurisdictional equivalence are as of yet irrelevant for a country such as Nigeria which is not even a G20 nation. At this time, this dissertation canvasses that focus should be expended on local financial market development. Only after this is achieved can such themes become relevant.
[90] Deconstructing the figuration of the derivatives regulatory scheme is the core focus here.

on specialist issues with limited compact-wide legal/regulatory import.[91] Though, for the avoidance of doubt, the work does develop an analytical framework comprised of objective parameters by which it tackles the research questions[92] and then applies this framework against the selected comparator jurisdictions to extrapolate relevant lessons for the local jurisdiction.[93]

This dissertation is not focused on the operation or mechanics of derivatives trading. It focuses strictly on law and regulation and is therefore a legal enquiry. So, while the *2006 ISDA Model Netting Act* and ISDA's methodology of effecting transnational flow of reform is explored, for example,[94] this work does not consider the model law's provisions nor does it consider those contained in the ISDA Master Agreement from a technical or operational perspective. This work is not concerned with operational risk in derivatives trading and clearing processes, neither is it concerned with liquidity risk, etc., as they these are not legal/regulatory concerns in the context which the dissertation is situated. Finally, the research period was from 2018 to 2021.

1.9. Subject Jurisdiction of Research: Nigeria

To provide much-needed context, information on the subject jurisdiction is in order at this point. Nigeria, a budding democracy, operates a federal republic. The country is divided into 36 semi-autonomous states and 1 Federal Capital Territory,[95] which is the capital, known as Abuja. Nigeria is the most populated country in Africa, with an estimated population of around 199 million people as at 2019.[96] The country constitutes about 47% of West Africa's population,[97] has a population growth rate of 2.61%, and one of the largest youth populations in the world.[98] It is Africa's largest

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[91] For example, the tax implication of derivative transactions on companies' balance sheets or accounts. Though, for the avoidance of doubt, under Nigerian law, revenue from derivatives trading is regarded as income and is therefore liable to companies' income tax to the extent that they are not exempted from tax. Where a seller holds the derivatives as stock-in-trade, proceeds will be treated as income; in other cases, they will be treated be capital. Gains or losses on derivatives only become an issue when the derivatives are realised. See "FIRS Tax Implications of the Adoption of the International Financial Reporting Standards", available at: <https://pwcnigeria.typepad.com/files/ifrs-tax-implication-circular-final-revised.pdf>.
[92] See chapter 3.
[93] See chapter 5.
[94] See chapter 4.
[95] The 36 states and the FCT are grouped into six geopolitical zones: (1) North Central: Niger, Kogi, Benue, Plateau, Nasarawa, Kwara and FCT; (2) North East: Bauchi, Borno, Taraba, Adamawa, Gombe and Yobe; (3) North West: Zamfara, Sokoto, Kaduna, Kebbi, Katsina, Kano and Jigawa; (4) South East: Enugu, Imo, Ebonyi, Abia and Anambra; (5) South South: Bayelsa, Akwa Ibom, Edo, Rivers, Cross River and Delta; and (6) South West: Oyo, Ekiti, Osun, Ondo, Lagos, and Ogun.
[96] IMF, Nigeria <https://www.imf.org/en/Countries/NGA#countrydata> accessed 20 September 2019.
[97] Nigeria is a very diverse country with well over 250 ethnic groups, the largest being the 'Hausa/Fulani', the Yoruba, and the Igbo. The major languages spoken in Nigeria are English, Pidgin English (a combination of indigenous Nigerian languages and English which was evolved through hundreds of years of contact with European traders and later the British colonial authorities), Hausa, Yoruba, Igbo, Fulfulde, and Ijaw. English has been the official language in the country since 1960.
[98] Central Intelligence Agency, The World Factbook: Nigeria <https://www.cia.gov/library/publications/the-world-factbook/geos/ni.html> accessed 20 September 2019.

exporter of crude oil and also possesses the largest proven natural gas reserves on the continent. In terms of land mass, the total area is 923,763 km², and the population density is 221 per km².[99]

Figure 1.4.: Map of Nigeria

Source: Australian Government Department of Foreign Affairs and Trade, *DFAT Country Information Report – Nigeria* (9 March 2018) <https://dfat.gov.au/about-us/publications/Documents/country-information-report-nigeria.pdf> accessed 8 October 2019

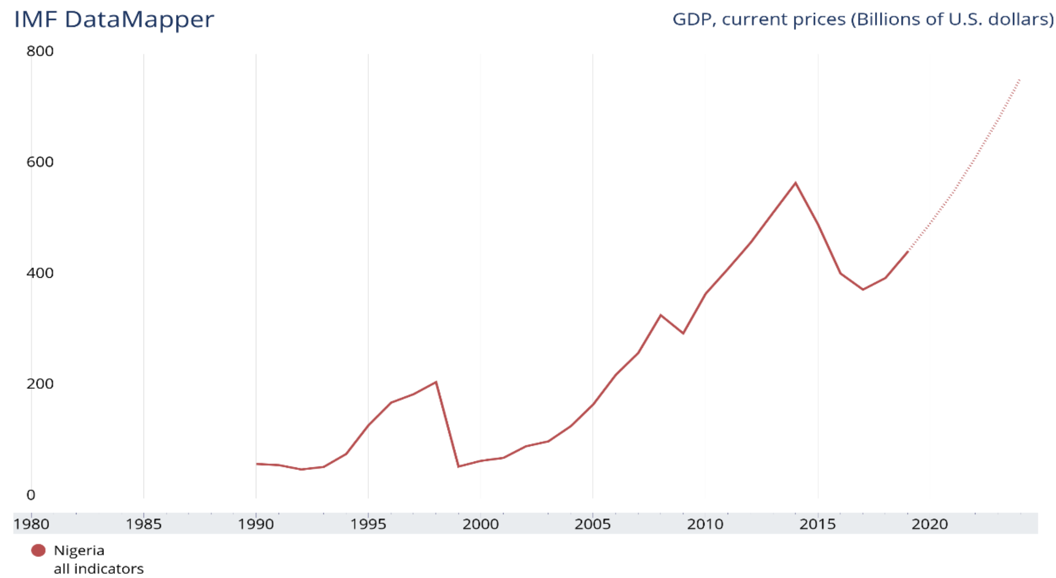
1.9.1. Economic Snapshot

A frontier economy,[100] Nigeria's GDP stood at around $444.92 billion as at September 2019.[101] With an abundance of natural resources, the sale of crude oil is the Nigerian government's largest source of revenue.[102] Emerging from a recession which commenced in 2016, the economic outlook remains delicate and a lot would be dependent on the ability of the Nigerian government to implement and execute robust structural and economic policies.[103] Supported by increased crude

[99] Nigeria is about twice the size of California and three times the size of the UK.
[100] IMF, IMF Executive Board Concludes 2019 Article IV Consultation with Nigeria, Press Release No. 19/99 <https://www.imf.org/en/News/Articles/2019/04/03/pr1999-nigeria-imf-executive-board-concludes-2019-article-iv-consultation-with-nigeria> accessed 6 October 2019 58 ("Nigeria's debt-to-GDP level, while higher than in the past decade, remains relatively low compared to other frontier market economies.")
[101] IMF, World Economic Outlook (April 2019) <https://www.imf.org/external/datamapper/NGDPD@WEO/NGA?zoom=NGA&highlight=NGA> accessed 4 October 2019.
[102] Aaron Sayne, Alexandra Gillies and Christina Katsouris, 'Inside NNPC Oil Sales: A Case for Reform in Nigeria' (National Resource Governance Institute 2015) <https://resourcegovernance.org/sites/default/files/NRGI_InsideNNPCOilSales_CompleteReport.pdf> accessed 4 October 2019.
[103] IMF (n 104) at 1. ("Under current policies, the outlook remains therefore muted. Over the medium term, absent strong reforms, growth would hover around 2½ percent, implying no per capita growth as the economy faces limited increases in oil production and insufficient adjustment four years after the oil price shock.")

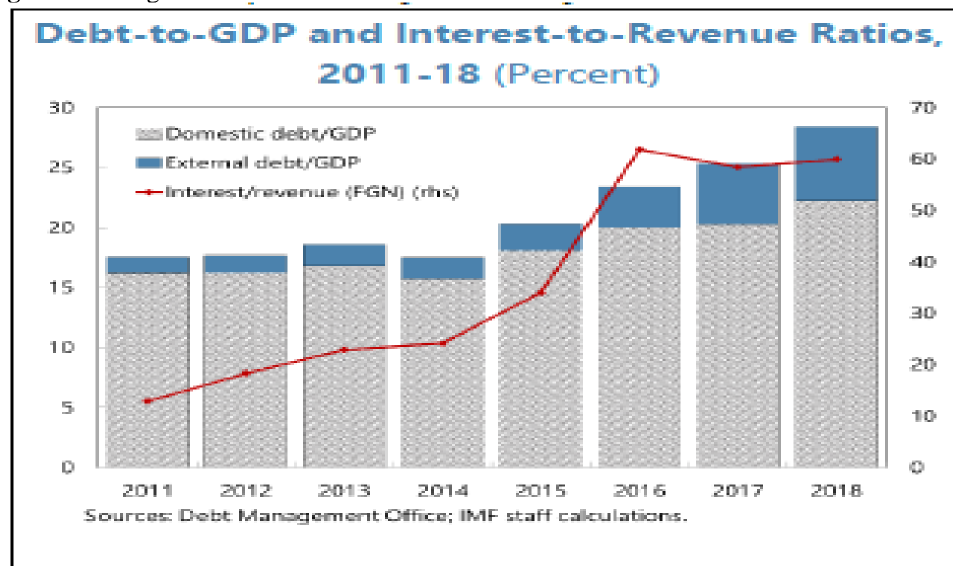
oil production and output growth in agriculture, Nigeria is expected to consolidate the gains made in late 2017, with growth projected at 2.1% in 2018 and 2.5% through 2019. As at June 2018, public debt stock stood at $73.2 billion, up from $71.0 billion in 2017, being 17.5% of GDP. Debt-to-GDP ratio also stood at 28.42%.[104]

Figure 1.5.: Chart setting out Nigeria's GDP trajectory since 1980



Source: IMF, World Economic Outlook (April 2019) <https://www.imf.org/external/datamapper/NGDPD@WEO/NGA?zoom=NGA&highlight=NGA> accessed 8 October 2019

Figure 1.6.: Nigeria's Debt-to-GDP and Interest-to-Revenue Ratios 2011-18



Source: IMF, IMF Executive Board Concludes 2019 Article IV Consultation with Nigeria, Press Release No. 19/99 <https://www.imf.org/en/News/Articles/2019/04/03/pr1999-nigeria-imf-executive-board-concludes-2019-article-iv-consultation-with-nigeria> accessed 6 October 2019

[104] IMF (n 104) at 11.

Looking forward, the country's GDP is projected to grow by 2.3% through 2019 and 2.4% through 2020.[105] This outlook is premised on higher oil prices and production, as well as moderately stronger agricultural performance, which is expected to help generate some growth and provide direly needed fiscal space, as the government struggles with articulating and implementing important structural reforms to diversify the economy.

It bears pointing out that the administration of the country's major revenue earning resource is not especially reassuring. Neither the country's statutory oil company, the NNPC,[106] nor the broader energy sector is optimally structured.[107] In particular, it has been highlighted that "NNPC's approach to oil sales suffers from high corruption risks and fails to maximize returns for the nation. These shortcomings also [characterise] NNPC as a whole. Over 38 years, the corporation has neither developed its own commercial or operational capacities, nor facilitated the growth of the sector through external investment. Instead, it has spun a legacy of inefficiency and mismanagement."[108]

Added to this, fiscally, the country has limited room to manoeuvre and is in a tight position in the immediate-to-medium term without the implementation of wholesale economic reform. One of the country's top credit rating agencies points out:

> "[De]spite the positive spin about Nigeria’s benign debt to GDP currently around 20%, interest payments as a percentage of revenue are over 60%. Other fiscal indicators also put Nigeria at the bottom of the rung even amongst sub-Sahara African peers. Nigeria's five-year average of capital expenditure as a percentage of nominal GDP is a meagre 2.1% which pales in comparison to Angola (7%) and Kenya (7.6%). However, with a projected budget deficit of ₦3.8 trillion in 2019, CAPEX as a percentage of nominal GDP could decline further to 1.1% this year. The implication of this burgeoning deficit is that in 2019, Nigeria will have to borrow to meet its obligatory [spending] (interest payments, transfers and payroll) projected at about ₦5.4 trillion with a revenue of about ₦4 trillion. This implies a cash crunch for CAPEX."[109]

Nevertheless, the execution of the *Economic Recovery and Growth Plan* (2017–2020), which, at the time of writing just expired, holds some mild promise. The programme is aimed at weaning the country off its dependence on crude oil and focuses on six priority sectors: agriculture;

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[105] African Development Bank Group, Nigeria Economic Outlook <https://www.afdb.org/en/countries/west-africa/nigeria/nigeria-economic-outlook> accessed 4 October 2019.
[106] The NNPC was created in 1977 pursuant to the *Nigerian National Petroleum Corporation Act 1977*.
[107] See generally IMF, Nigeria: Selected Issues (April 2019) <https://www.imf.org/~/media/Files/Publications/CR/2019/1NGAEA2019002.ashx> and Ugo Nwokeji, 'The Nigerian National Petroleum Corporation and the Development of the Nigerian Oil and Gas Industry: History, Strategies, and Current Directions' [2007] James A. Baker III Institute for Public Policy <https://www.bakerinstitute.org/media/files/page/9b067dc6/noc_nnpc_ugo.pdf> both last accessed 4 October 2019.
[108] Aaron Sayne *et al* (n 106).
[109] Agusto & Co., Nigeria Banking Industry Report 2019 <https://www.agusto.com/publications/buhari-version-ii-2019-2023-economic-perspectives/>.

manufacturing; solid minerals; services (including information and communication technology, financial services, tourism, arts, and creative industries); construction and real estate; and, of course, energy. The government has produced specific programmes for each sector and has defined broad growth policy enablers to drive the plan. Faithful and deliberate implementation of the plan will be key;[110] nevertheless, it remains incontrovertible that the country has great potential.

1.9.2. Financial System and Regulatory Approach

The Nigerian financial system is sectoral and functional in its constitution. [111] In terms of regulatory approach, it is made up of a web of financial sector regulators (on the one hand) and institutions, markets, participants, and financial products (on the other hand) facilitating the flow and allocation of funds weaved together over time by law, custom, and practice.[112] The major regulatory actors in this system are: (a) the CBN; (b) the NDIC; (c) the SEC; (d) NAICOM; (e) PenCom; (f) DMO; and (g) AMCON.

Nigeria adopts a combination of an institutional and functional regulatory approach, as noted, with a number of regulators exerting purview over a diverse collection of financial market participants ranging from development finance institutions, to deposit money banks, capital market participants (such as issuing houses, securities dealing firms, registrars, etc.), to insurance companies, to market infrastructures, and pension fund industry participants (particularly administrators and custodians).[113] As far as this work is concerned, the regulatory actors most relevant are the SEC and the CBN. These two are discussed extensively in chapters 3, 4, and 5. The financial structure of the Nigerian economy and the accompanying intermediation model is largely banks-based, with the Nigerian capital markets occupying a junior, though crucial role.[114] Derivatives are therefore a very important instrument when it comes to the activities of these financial market participants in the Nigerian financial system. The function these financial products play in this jurisdiction is explored fulsomely in chapters 2 and 3.

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[110] IMF, IMF Executive Board Concludes 2019 Article IV Consultation with Nigeria, Press Release No. 19/99 <https://www.imf.org/en/News/Articles/2019/04/03/pr1999-nigeria-imf-executive-board-concludes-2019-article-iv-consultation-with-nigeria> accessed 6 October 2019 ("Directors, therefore, urged the authorities to redouble their reform efforts, and supported their intention to accelerate implementation of their Economic Recovery and Growth Plan.").

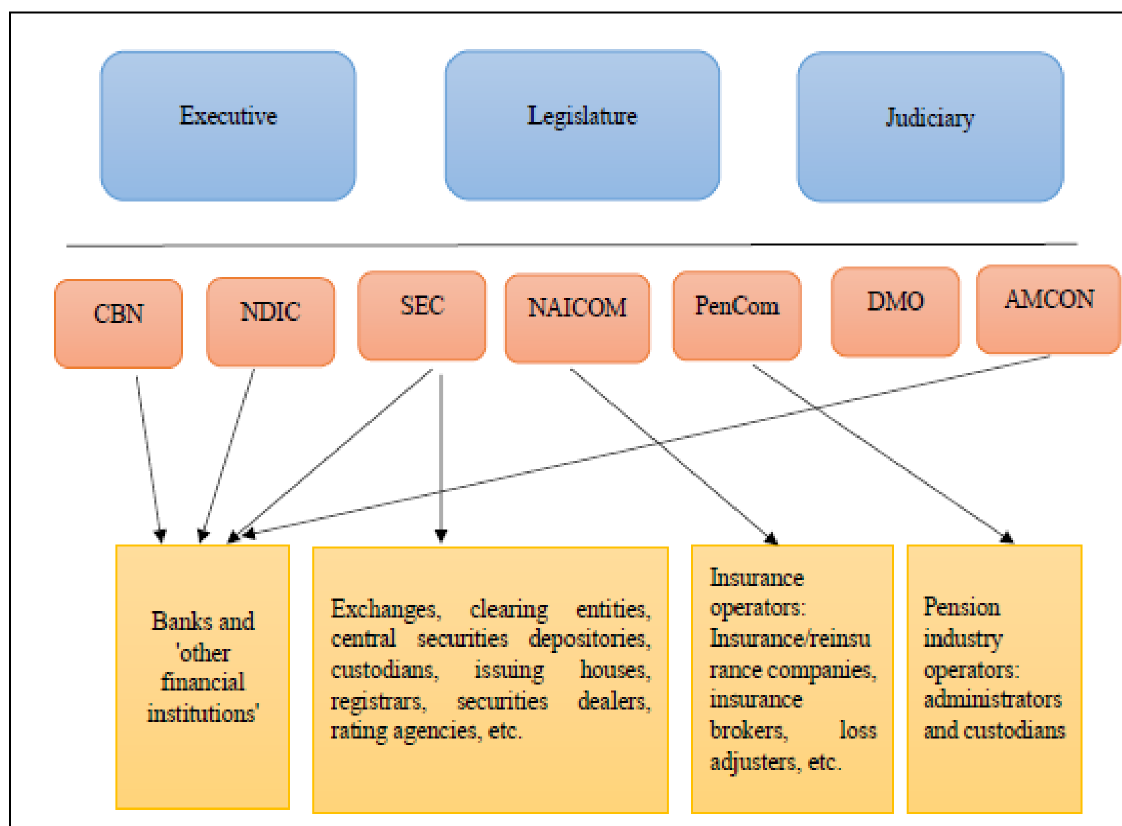
[111] Robert Merton and Zvi Bodie, "A Conceptual Framework for Analyzing the Financial Environment", in Dwight Crane, Kenneth Froot, Scott Mason, Andre Perold, Robert Merton, Zvi Bodie, Erik Sirri, and Peter Tufano (eds) The Global Financial System: A Functional Perspective (Cambridge, MA: Harvard Business School Press 1995) 3.

[112] John Armour, Dan Awrey, Paul Davies, Luca Enriques, Jeffrey Gordon, Colin Mayer, and Jennifer Payne, *Principles of Financial Regulation* (Oxford University Press 2016) 23.

[113] Ibid at 28-38.

[114] Augustine Arize, Ebere Ume Kalu, Nelson Nkwo, 'Banks Versus Markets: Do They Compete, Complement or Co-evolve in the Nigerian Financial System? An ARDL Approach [2018] 45 Research in International Business and Finance 427-434.

Figure 1.7.: Depiction of Nigerian financial system



Developed by researcher

At the top of the financial system are the executive (overseen by the President), the legislature, and the judiciary. Between the executive and the legislature, laws are enacted which lead to the creation of institutions, systems, and processes which make up of the artery of the financial system. The judiciary plays an adjudicatory role, stepping in from time to time to hand down pronouncements as to the legality or otherwise of laws enacted from time to time.[115]

[115] Nigeria operates a US-style presidential system of government and some variation of federalism. As such, the usual tensions observable in US jurisprudence (such as in *US v Nixon* 418 US 683 (1974)) on separation of powers feature in Nigerian jurisprudence as well. The principle was enunciated in *Adeyemi (Alafin of Oyo) & Ors v Attorney General of Oyo State & Ors* (1984) LPELR-169 (SC):

> "The doctrine of separation of powers means that neither the legislature, the executive, nor the judiciary should exercise the whole or part of another's power. It was held by this court in *Lakanmi & Anor v The Attorney-General of Western State & Ors* (1974) 4 E.C.S.L.R. 713 at p. 731 (1971) 1 U.I.L.R. 201 at p. 218 that the structure of the Constitution of the Federation of Nigeria, 1963 was based on the separation of powers, and in the distribution of powers amongst the organs of government the courts were vested with the exclusive right to determine justiciable controversies between citizens and between citizens and the State."

Importantly, there is a body known as the FSRCC which was established pursuant to the CBN Act 2007.[116] The body comprises of representatives from ten entities—CBN, NDIC, SEC, NAICOM, CAC, Federal Ministry of Finance, PenCom, NGX Group, NCX, and the FIRS—and is tasked with *inter alia* "[co-ordinating] the supervision of financial institutions especially conglomerates",[117] "reduction of arbitrage opportunities usually created by differing regulation and supervision standards amongst supervisory authorities in the economy", "[eliminating] any information gap encountered by any regulatory agency in its relationship with any group of financial institutions",[118] and "[articulating] the strategies for the promotion of safe, sound and efficient practices by financial intermediaries".[119] It is important to note that one of the key arguments made in this work is that the extant institutional structure underpinning derivatives (and indeed financial) regulation in Nigeria is in need of urgent reordering.[120] For example, as will be seen in chapters 3 and 5, the coordinating function served by the FSRCC yields little to no returns as far as the regulatory posture of the CBN and SEC go in relation to the derivatives market.

1.10. Research Methodology

This study is mostly library-based. It employs a combination of two principal methodologies: doctrinal and comparative. The justification for the adoption of doctrinal and comparative methodologies is connected to the nature of the research questions in that the work seeks to determine, firstly, *how* derivatives *are* regulated in Nigeria and, secondly, how they *ought to be* regulated, and addressing these questions require an intrinsic approach (for the first question) and a correlative approach (for the second question), respectively.

In addition, the researcher obtained data from an exchange group in the subject jurisdiction and engaged with personnel at the most prominent local clearing entity to gain an understanding of its operations (especially as it relates to the management of defaulting financial market participants[121]). The researcher also engaged with a renowned financial law expert[122] in generating useful clarity as to some of the conclusions reached in the present work.

[116] Section 43 of the CBN Act 2007.
[117] Section 44 of the CBN Act 2007.
[118] Ibid.
[119] Ibid.
[120] See chapters 3, 4, and 5 generally.
[121] See chapter 3 at 3.4.2.
[122] See chapter 3. The researcher engaged with financial law expert, Professor Philip Wood CBE, QC (Hon). Details of engagement on file with researcher.

1.10.1. Doctrinal Methodology

This work employs the doctrinal research methodology in effecting an analysis of the law and regulation as it currently exists in Nigeria. Doctrinal research, a methodology especially useful in common law contexts, is the process "used to identify, analyse and synthesise the content of law",[123] with relevant case-law, legislations, and regulations being critically examined and pertinent extrapolations being welded to determine an exhaustive and precise statement of law as it relates to the specific subject-matter being studied. In the course of the present work, employing this methodology involved two broad steps: firstly, identifying the relevant sources of law and then interpreting and analysing the text. The second step, having identified the relevant documents, involved analysing the law and synthesising the issues with the rules and then reaching a conclusion based on the facts established and the law considered. This, it is submitted, is the most effective approach to adopt here because the research intent is to "to determine an 'objective reality', that is, a statement of the law encapsulated in legislation or an entrenched common law principle".[124]

The study explores Nigerian law and its regulatory regime as it relates to derivatives, financial transactions, and relevant market participants set out in primary sources such as those contained in relevant key legislations such as the ISA 2007, the CAMA 2020, the CBN Act 2007, the BA 2004, the BOFIA 2020, the NDIC Act 2004, important regulations issued by key financial sector regulators such as the SEC and the CBN and SROs (such as financial market infrastructures within the NGX Group and the FMDQ Group) and, of course, case-law and judicial pronouncements. Extensive analysis of output contained in secondary sources such as books, journals, articles, newspapers, and relevant literature on the Nigerian capital and financial markets was also employed. This was done with a view to identifying the strengths and, more particularly, the weaknesses of the regulatory framework in Nigeria. Importantly, in analysing the law and welding pertinent issues to reach properly considered conclusions, this work also explores material, reports, guidelines, and documents issued by key international organisations, multilateral agencies, and transnational actors such as, but not limited to, the World Bank, BIS, IOSCO, IMF, FSB, African Development Bank Group, ISDA, EU, and the WFE.

This research takes this approach because financial derivatives, their regulation, traders, and attendant issues are global in nature, with participants straddling ever-more connected financial markets. As will be seen in this work, the CPSS-IOSCO Principles are just as relevant for stakeholders in the UK as they are for stakeholders in Nigeria. Thus, it would have been fatal not

[123] Terry Hutchinson, "Doctrinal Research: Researching the Jury" in Dawn Watkins and Mandy Burton (eds) *Research Methods in Law* (2nd edn, Routledge 2018) 13.
[124]Terry Hutchinson and Nigel Duncan, 'Defining and Describing What We Do: Doctrinal Legal Research' [2012] 17(1) Deakin Law Review 84 -119.

to have examined such content in determining an 'objective reality' of *what* the law and regulation of derivatives is in Nigeria and *how* they ought to be regulated.

1.10.2. Comparative Methodology

As a second methodological prong, this work employs a comparative approach. Given that "[c]omparison is an instrument used to falsify or verify the relationship between […] phenomena",[125] analyses of comparator jurisdictions—the British and South African regulatory regimes—are tested against Nigeria's to: (a) compare the regulatory models present in those comparator countries and Nigeria, in order to unravel the intricacies of these regimes and (b) identify important lessons which Nigeria can incorporate and internalise from these comparator regulatory frameworks on matters pertaining to the regulation of derivatives.

In substance, this approach entails comparing the law of one country to that of another country. There are two broad steps under this approach. The first involves examining an assemblage of legal and regulatory data as against another and making an assessment as to their similarities and differences, while the second step involves systematising the legal and regulatory data to generate an understanding of their content and breadth.[126] This methodology prompts one "to reflect upon [one's] legal system, on the 'law as rules' approach, on [one's] legal practice, on [one's] legal tradition, on [one's] legal education. It makes us [ask] what exactly determines law, what is essential to law and what is not."[127] Such an approach is crucial, especially in areas of law such as derivatives where tenets of transnational private law are flowing down into national legal systems from transnational actors such as ISDA, FSB, and IOSCO. Analysing the workability of these recommendations as potential content for legislation and jurisprudence requires holding up jurisdictions where they have been internalised against each other.

The comparator jurisdictions which have been selected here have been chosen for specific reasons. In the case of the United Kingdom, Nigeria, up until 1960, was British territory and thus was bequeathed with a legal system built on the English common law tradition, as a result of which much of Nigeria's legislations, particularly those relevant to this work are modelled on the laws of England and Wales. Indeed, the first legislation on company law in Nigeria was the *Companies*

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[125] Helen Xanthaki, 'Legal Transplants in Legal Legislation: Defusing the Trap' [2008] 57(3) International and Comparative Law Quarterly 659-674.
[126] Edward Eberle, 'The Method and Role of Comparative Law' [2009] 8(3) Washington University Global Studies Law Review 451-486.
[127] Mark Van Hoecke and Mark Warrington, 'Legal Cultures, Legal Paradigms and Legal Doctrine: Towards a New Model for Comparative law' [1998] 47(3) International and Comparative Law Quarterly 495-536.

Ordinance of 1912, which was largely modelled after the Companies (Consolidation) Act 1908, while the present CAMA 2020 (which repealed and replaced the *Companies and Allied Matters Act 2004*) is largely modelled on the Companies Act 1985. Even though independence curtailed the applicability of English law in Nigeria, decisions of English courts and British regulatory approaches retain persuasive effect in Nigerian legal jurisprudence, so it follows that it would be useful to employ the UK derivatives regulatory regime as a comparator jurisdiction, as they both belong to the 'common law family'.[128] Specifically, by comparing the regime in Nigeria and the UK, a more robust understanding of the state of the law in Nigeria can be generated, given that divergencies would readily come into focus once areas where the UK has updated its laws are identified.

As for South Africa, this too presents an interesting comparator jurisdiction. It is Sub-Saharan Africa's largest economy in terms of GDP and is its most industrialised. (Nigeria's economy is only larger in purchasing-power parity terms).[129] Accordingly, when compared to Nigeria, South Africa presents deeper and more liquid financial markets[130] and a more active derivatives market.[131] South African banks, like their Nigerian counterparts, employ OTC derivatives as tools to speculate on exchange rates and interest rates and to hedge their own risks and their clients' risks. Other financial institutions, such as pension and insurance funds, asset managers, and corporate treasurers in the country also use OTC derivatives to hedge against unwanted price movements to reduce cash flow volatility.[132] As such, being an emerging market economy just like Nigeria, it is undoubtedly useful to examine legal steps (legislation and jurisprudence) which South Africa has taken different to Nigeria which has enabled it to build a more vibrant derivatives market, given that both countries are contextually and situationally proximate. Chapter 5 will also show that South Africa's derivatives regulatory framework is in many respects demonstrably more robust than Nigeria's.

This study does not consider the difference in legal traditions between Nigeria and South Africa as problematic in any way. Even though Roman-Dutch law is the foundation of South African common law, this law has been very much influenced by English law, as key English statutes (in

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[128] Ibid. Van Hoecke and Warrington identify three legal families: the Romano-Germanic family, the Common Law family, and the Socialist family.

[129] Joseph Cotterill, 'South Africa's Economic Growth Stutters' *Financial Times* (5 March 2019) <https://www.ft.com/content/1688aa70-3f53-11e9-b896-fe36ec32aece> accessed 6 May 2019.

[130] See Official Monetary and Financial Institutions Forum, *Absa Africa Financial Markets Index* (2018) <https://www.omfif.org/media/5396362/absa-africa-financial-markets-index-2018.pdf> 7 accessed 6 May 2019.

[131] See Audrey Nguema Bekale, Erika Botha, and Jacobus Vermeulen, 'Institutionalisation of Derivatives Trading and Economic Growth: Evidence from South Africa' [2015] Economic Research Southern Africa ERSA Working Paper 505 3.

[132] IMF, *South Africa: Financial Sector Assessment Program – Reforms in the OTC Derivatives Market* (February 2015) 12.

areas like company law, shipping law, arbitration, and insurance law) have been transplanted into South African law over time.[133] Added to this, South African courts (like their Nigerian counterparts) also treat decisions of English courts as having persuasive value.[134] Therefore, while a UK comparison will help build a more robust understanding based on its more advanced features, a South African comparison will further enhance the process by adding contextual and situational relevance.[135] Additionally, other jurisdictions—such as the EU, Canada, and Singapore—are compared to the subject jurisdiction, where useful lessons are considered extractable. The output of this process serves as the basis for the development of recommendations and propositions for reform set out in chapter 6.

1.11. Research Limitations

Some limitations were encountered in documenting this study. The principal one was connected to the ongoing changes in one of the comparator jurisdictions employed, the UK. Specifically, the ability to study, document, and draw lessons from UK derivatives law and regulation was affected by the impact of Brexit in that it created for some disruption, uncertainty, and unpredictability during the research period. This notwithstanding, even though the UK is no longer a member of the EU, EU legislation as it applied to the UK as at 31 December 2020 is now a part of UK domestic legislation.[136] And with London, a foremost financial centre, still nurturing designs on maintaining its position,[137] it is entirely reasonable to expect that the eventual regulatory framework which will emerge will not be dramatically different to that which existed while the UK was a member of the EU;[138] although with the EU keen to capture lucrative Euro-denominated derivative trading activity from London, it is still too early to conclude.[139] Nevertheless, the themes drawn from UK law during the research period and applied against the Nigerian regime are considered as good law for the purpose of this study.

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[133] Lourens du Plessis, 'The Status and Role of Legislation in South Africa as a Constitutional Democracy: Some Exploratory Observations' [2011] 14(4) Potchefstroom Electronic Law Journal 92-102.

[134] Ibid.

[135] Importing and replicating solutions from other countries may not always work if careful attention is not paid to contextual differences, as is argued extensively in this work. See chapter 4.

[136] See "EU Legislation and UK Law", available at: <https://www.legislation.gov.uk/eu-legislation-and-uk-law>.

[137] Silla Brush and Alexander Weber, 'London's Fight to Remain a Financial Hub After Brexit' *Bloomberg* (3 July 2019) <https://www.bloomberg.com/news/articles/2019-07-03/london-s-fight-to-remain-a-financial-hub-after-brexit-quicktake> accessed 2 January 2021.

[138] Silla Brush, 'Britain Budges on Derivatives in Last-Minute Brexit Relief' *Bloomberg* (31 December 2020) <https://www.bloomberg.com/news/articles/2020-12-31/britain-budges-on-derivatives-rules-in-last-minute-brexit-relief> accessed 2 January 2021.

[139] Lucy Burton, 'Banks Urged to Shift Clearing Out of London in Leaked Brussels Document' *The Telegraph* (23 February 2021) <https://www.telegraph.co.uk/business/2021/02/23/banks-urged-shift-clearing-london-leaked-brussels-document/> accessed 23 February 2021.

Added to this, it must be mentioned that the extreme dearth of contemporary literature (texts and academic articles) on Nigerian financial law (broadly conceived) was also unhelpful. Given this situation, it follows, as noted above, that literature on Nigerian derivatives law specifically is virtually non-existent. This therefore affected the ability to synthesise global financial regulation, theories, and thought against understanding within the jurisdiction. Reliance thus had to be placed principally on available black-letter law.

1.12. Conclusion

The objective of this first chapter has been to provide a sketch of the broad figurations of this dissertation and provide a summary on the key arguments, themes, and findings in this work, which is focused on the task of generating a clear and representative understanding of the regulatory framework in Nigeria as it relates to derivatives. Chapter 1 has conceptualised—for the purpose of this study—what an optimally ordered regulatory framework should look like, along with how appurtenant infrastructure accompanying such a framework should appear, and therefore clarified the framework against which the fractures in the Nigerian regulatory environment are tested in the remainder of this work. For absolute clarity, it has set out two specific research questions, which guide the output generated in the remainder of this work. The chapter has also provided insight into the subject jurisdiction, the relevant research methodology adopted in this work, clarified the scope of the research, and ultimately what contribution this dissertation makes to the body of knowledge.

The chapters which follow, together, help develop an understanding of how derivatives are regulated globally and in the subject jurisdiction and then go on to develop the principal arguments in this work, which are that the intended effects of recent derivatives reform in Nigeria cannot and (will not) be achieved under current terms. They also document the fractures existent within Nigerian law and regulation. Finally, recommendations to help implement reform are then set out.

Chapter 2 — Derivatives: Anatomy, Trading, Markets, and Appurtenant Infrastructure

2.1. Introduction

This chapter sets out the technical frame for this study. It develops (from a global perspective) an understanding of derivatives, the history of these devices, their anatomy, how and where they are transacted, their uses, and the surrounding architecture integral to the proliferation of these financial products in the post Bretton Woods global financial arena. Scrutinising and building an understanding of the law and regulation of derivatives in Nigeria must necessarily be preceded by a clear and complete exploration of the constitutive consideration of what derivatives are.

The chapter proceeds by setting out a primer on derivatives, exploring the history and commercial imperative for said products and then proceeds to consider their typology and how they are transacted, i.e., on exchanges and OTC.[1] Then it goes on to examine the product-types and product-users, providing an overview of the global derivatives market and the legal devices known as CCPs, distinguishing them from clearing houses.[2] It further reflects on the state of play, providing insight into the relevant market segments, products traded in the country, and then reveals important data as to market size, among others. In particular, insight is provided into the major derivative product transacted in Nigeria, the OTC FX futures, examining in detail the relevant market structure as it relates to this product. Finally, the chapter examines the merits and demerits (private and social) of derivatives and the appurtenant infrastructure associated with these products.

2.2. Derivatives: The Fundamentals

So, what are derivatives? Basically, a derivative is a contract or financial instrument whose value is derived from the value of an underlying asset at a future date.[3] The underlying asset (typically referred to as the "underlying" or "underlier") may comprise of any number of assets.[4] The value of a derivative will depend on the value of an instrument or commodity in the underlying market,

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[1] To reach a confined determination of the law and regulation of derivatives in Nigeria, the distinction between OTC derivatives and ETDs is of minimal consequence. It matters technically, of course, but does not in a legal sense.

[2] This point is important in Nigerian derivatives regulation. See chapter 3 at 3.4.

[3] For a robust and comprehensive introduction to financial derivatives, see generally John Hull, *Options, Futures, and Other Derivatives* (10th edn, Pearson Education 2017).

[4] *Procter & Gamble Co v Bankers Trust Co*, 925 F. Supp. 1270 (S.D. Ohio 1996) ("[d]erivatives transactions may be based on the value of foreign currency, US Treasury bonds, stock indexes, or interest rates. The values of these underlying financial instruments are determined by market forces, such as movements in interest rates. Within the broad panoply of derivatives transactions are numerous innovative financial instruments whose objectives may include a hedge against market risks, management of assets and liabilities, or lowering of funding costs; derivatives may also be used as speculation for profit").

'cash market', which is the market for the immediate delivery of the instrument, asset, or commodity to which the derivative refers.

These instruments have been in existence since at least 2000 B.C., when merchants in what is now Bahrain engaged in consignment transactions for goods destined for India. A few hundred years later, the 48th law in the Code of Hammurabi would record a contractual relation in the form of a put option.[5] Ancient Greece and Rome also contributed to the development of derivatives. According to the writings of Aristotle, in approximately 580 B.C., Thales, a philosopher and mathematician, purchased options on olive presses and made a significant profit from an unusually large harvest by leasing the presses at a substantial premium. Intriguingly, Hudson also narrates stories of ancient Babylonian kings selling instruments which allowed the holder to call on the kings to deliver up a soldier and two slaves for each instrument held once payment of the price specified in the instrument had been made.[6] Roman law went so far as to enforce the intentions of contracting parties, even where they were speculative.[7] African records too show that Alexandria's futures market in Egypt was one of the oldest in the world. The first recorded cotton transaction in Egypt took place in 1865 in Alexandria's Café de l'Europe, with cotton forward contracts being legalised in 1909.

As to how these instruments are structured: future obligations of one or more of the parties will often be linked in some specific manner to another asset or index or notion, such as the delivery of the asset or the payment of an amount calculated by reference to its value or the value of the index or notion. The underlying asset may be a commodity, a currency, interest rates, the value of a property, a security, indices of assets, or even "the price of hogs to the amount of snow falling at a certain ski resort".[8] The obligations and rights of the parties under these contracts constitute a separate asset and are traded accordingly. Unlike debt instruments evidencing advances, no principal is made available to a counterparty to be repaid and no investment income accrues thereon. The tenor/maturity of derivatives do vary, however, and they can be utilised for diverse purposes. The significant legal feature of derivatives is that they are *choses in action*,[9] which means they can be sold, pledged, and transferred to third parties. Consequently, they bear their own independent value, even though this is derived from the underlying contract. The commercial

[5] George Vincent, 'The Laws of Hammurabi' [1904] 9(6) American Journal of Sociology 737-754.
[6] Alastair Hudson, *The Law on Financial Derivatives* (6th edn, Sweet & Maxwell 2017) at para 5-08.
[7] For a historical perspective, see generally, Edward Swan, *Building the Global Market: A 4000-Year History of Derivatives* (Kluwer Law International 2000).
[8] Hull (n 3) at 23.
[9] *Torkington v Magee 2* [I902] 2 KB 427 ("'Chose in action' is a known legal expression used to describe all personal rights of property which can only be claimed or enforced by action, and not by taking physical possession.")

imperative(s) for these instruments invariably is to either (i) re-characterise and re-articulate an already existing obligation or (ii) speculate.

Hudson explains:

> "some derivatives relate to real, existing obligations and others are constructed by reference to entirely notional obligations, where the notional obligations are used to speculate on financial markets by imagining an amount of money which would have been invested on those markets. Therefore, the first rationale will typically be bound up with the management of the risk associated with some pre-existing obligation and so will constitute an attempt to manage the risk associated with that obligation by creating an entitlement to receive some cash flow which will counteract the loss which might result from the underlying obligation. The second rationale allows the parties to speculate on the performance of some identified, underlying marketplace by supposing that some notional investments were made in that market and that the return generated by that fictional investment on that market was in fact payable by one party to the other".[10]

2.3. Types of Derivatives and Relevant Markets

Derivatives are categorised into two classes based on how they are transacted (i.e., the markets they are dealt in):[11] (a) ETDs, which are transacted on organised trading venues or established platforms such as (derivatives) exchanges or (b) OTC derivatives, which are traded bilaterally between counterparties. Note that derivatives can also be described by referencing the underlying, e.g., credit derivatives, currency derivatives, equity derivatives or commodity derivatives.

2.3.1. Exchange Traded Derivatives

As noted, these are traded on organised venues, such as (derivatives) exchanges, with settlement being typically organised/guaranteed by a clearing entity. On this point, connected to the difference between a 'security' and a 'derivative', it is important to note that there is a difference between a 'securities exchange' and a 'derivatives exchange';[12] although, it is possible for one to be both: while derivatives exchanges admit products and contracts based on a diverse variety of securities indexes, interest rates, commodity prices, exchange rates, and even nonfinancial eventualities, occurrences and outcomes, securities exchanges admits what this dissertation would categorise as the traditional notion of securities themselves, such as equity and debt securities i.e. stocks and bonds.[13]

[10] Hudson (n 6) at para 5-15.
[11] Ibid at para 5-07.
[12] Although this point may appear minor, it feeds into the larger question of the distinction between a 'derivative' and a 'security', a matter which is explored below. See chapter 3 at 3.2.1.
[13] What is crucial to keep in mind is that the traditional distinction which hitherto existed between exchanges that trade physical securities (such as shares and bonds), as opposed to derivatives, is fast abrading. Some think that this has "largely been due to regulation and custom". See Robert McDonald, *Derivatives Markets* (3rd edn, Pearson Education 2013) 6. Innovation and the increased integration of markets, product-wise and geographically, is also playing a part in this evolution.

An organised venue would be a market where participants would trade standardised contracts as defined and on terms set out by the venue. These sorts of venues have been in existence for quite a while. The most prominent example being the CBOT which was founded in 1848 to connect farmers and traders, with the initial objective of standardising the commodities that were traded, from a quantity and quality perspective. This arrangement came about because Chicago's storage facilities were insufficient to hold the quantities of grain supply after harvest periods. In addition, there were huge depreciations in grain prices during non-harvest periods, which led to storage facilities being underutilised for long stretches of time. These factors resulted in heightened volatility in grain prices during harvest and non-harvest periods. To address this, the first futures contracts (referred to as 'to-arrive contracts') were developed. Speculators, interested in trading these contracts as opposed to the actual underlying commodities,[14] thereafter emerged. In 1919, a competing futures exchange, the CME, was founded. The modern understanding of the derivatives market, however, began in 1972, when the CME commenced the trading of futures on several currencies. From the modern genesis of derivatives described above, McDonald is correct to note that "[the] link between price variability and the development of derivatives markets is natural",[15] emphasising that the introduction of derivative products in any given market would often coincide with the advent of or increase in price risk in the said market. In chapter 3, we shall see how the bid to address volatility in the Nigerian foreign exchange market has triggered the development of the local derivatives market.

Relatedly, it is important to make a quick point about 'electronic trading'. Hitherto, exchanges generally employed the open outcry system, a process which involved traders congregating on the trading floor of an organised venue, shouting, and signalling among themselves to signify intent and facilitate the execution of their trades and transactions. This process is now being replaced by electronic trading, which involves participants making use of applications and technology connected to computers and other such electronic devices such as tablets and mobile phones. Although, Shah and Brorsen break down the reasons for this trend as being connected to reduced transaction costs, fewer trading errors, and increased execution speed,[16] the reasons for this transition is essentially 'innovation', as touched on in chapter 1.[17] Coupled with artificial intelligence, the advent of electronic trading has brought about high-frequency and algorithmic trading, where computer programmes are used to facilitate and execute trades without manual intervention at a pace impossible for a human being to replicate. These are based on pre-set collection of rules predicated on timing, price, quantity, or any other suitable mathematical model

[14] Note that it had been stated above that these instruments are *choses* in action.
[15] McDonald (n 14) at 6.
[16] Samarth Shah and B. Wade Brorsen, 'Electronic vs. Open Outcry: Side-by-Side Trading of KCBT Wheat Futures' [2011] 36(1) Journal of Agricultural and Resource Economics 48–62.
[17] See chapter 1 at 1.1.

constructed by the traders. Although, some exchanges maintain vestiges and remnants of the open outcry system for aesthetical reasons, most exchanges and organised platforms around the world are moving towards electronic trading. As innovation continues to gather pace, it is expected that some of these organised venues and markets will exist entirely electronically.

Derivatives exchanges do have some important advantages. At their core, these organised venues can engender efficiency, help shift risk, promote liquidity, enhance price discovery, and provide accessibility to a large universe of market participants. One of the unique characteristics, as mentioned above, of a derivatives exchange is that where the exchange is connected to a clearing entity, it can help mitigate counterparty credit risk by acting as a counterparty to every trade. In such circumstances, participants who transact on derivatives exchanges are not saddled with worries about the creditworthiness of their counterparties. As is explained below, to discharge the responsibilities of a counterparty, the exchange or relevant clearing entity will have to establish a system for financial integrity, in addition to a mechanism of guaranteeing derivative trades, which will see to it that the entity has the financial capability and wherewithal to satisfy its obligations to fulfil the terms of relevant contracts.[18] More is said on this below.[19]

2.3.2. Over-the-Counter Derivatives

In contrast to ETDs, OTC derivatives are individually negotiated by the parties to achieve specific business objectives. These types of derivatives involve an undertaking to make a payment or to deliver a financial asset at an agreed time in the future. In the past, the markets for OTC derivatives were simply a collection of dealers and brokers who would advertise the prices at which they were willing to transact with large financial institutions making market for readily traded products. Typically, a deal would be transacted by telephone, with parties privately negotiating the nature of the deal and the price at which they wanted to deal. More recently, however, electronic platforms have become customary, and these allow market participants to view dealers' advertisements/propositions and, should they be so inclined, engage in these transactions.

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[18] Emerging Markets Committee of IOSCO, *Legal and Regulatory Framework: For Exchange Traded Derivatives* (1996) <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD53.pdf> accessed 12 October 2018 3 ("As in the case of market integrity, it is clearly in an exchange's [self-interest] to establish a reputation for financial integrity. Otherwise, it will be difficult to attract customers. Regulatory oversight of the exchanges' activities in this area can ensure that the proper systems are in place, and it can give customers additional confidence in the exchange's financial integrity.")

[19] See below at 2.8.

2.3.3. General Points on ETD and OTC Derivatives and Markets

Parties typically trading derivatives are categorised into two groups: dealers and end users. Dealers would typically be large financial entities, making markets, advertising products, creating new types of transactions, and responding to client requests for risk management solutions. The end users are also referred to sometimes as clients; they would often include large corporates, asset and investment managers (such as pension fund managers and hedge funds), and even governments. Generally, this class of entities use derivatives either to hedge risk or attempt to eliminate it in totality. For example, a large corporate might enter an interest rate swap to hedge risk on a bond issue, while an asset manager might invest in an equity index by purchasing a call option. Culp highlights that "[n]early all OTC derivatives today are still negotiated between a dealer and end user or between two dealers. Inter-dealer brokers also play an important role in the OTC derivatives space by helping dealers (and sometimes end users) identify willing counterparties and compare different bids and offers. In addition, various forms of electronic trading systems have also been developed to facilitate the negotiation of OTC derivatives."[20]

The historic perspective that is vital to bear in mind is that, firstly, in the OTC markets, advertised prices by no means implied a firm commitment to trade, which is a clear difference with what typically occurred on exchanges or organised trading venues. Secondly, operating in the OTC markets did not include trade reporting obligations, thus advertised prices typically represented the only information available to non-dealers. Furthermore, the negotiation and consummation of a trade was strictly bilateral in nature; as such, provided that two parties could agree a transaction and they both possessed the capacity to legally consummate the deal, they could do so without the involvement or the need to report to a third party. Lastly, the bilateral characteristic of OTC trading inevitably meant that the responsibility for documenting and recording trades lay with the two parties involved and no one else. Generally, OTC derivative transactions are documented through standard documentation[21] developed by the ISDA,[22] which is an important component in the global derivatives trading architecture today.

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[20] Christopher Culp, 'OTC Cleared Derivatives: Benefits, Costs, and Implications of the Dodd-Frank Wall Street Reform and Consumer Protection Act' [2010] 20(2) Journal of Applied Finance 103-129.

[21] This is the standardised agreement published by ISDA, which is used to document OTC derivatives transactions. It is known as an ISDA Master or simply an "ISDA".

[22] ISDA has around 900-member institutions from 68 countries. These members comprise a diverse range of derivatives market participants, including corporations, investment managers, government and supranational entities, insurance companies, energy and commodities firms, and international and regional banks. Market participants aside, members also include key components of the derivatives market infrastructure, such as derivatives/securities exchanges, intermediaries, clearing houses and repositories, law firms, accounting firms and other service providers in the relevant financial markets value chain. For more information, see: <https://www.isda.org/>. More is said on ISDA in chapter 4 at 4.3.

In certain respects, OTC transacting is more advantageous, when compared to exchange dealing.[23] Firstly, and perhaps most important, participants in an OTC market can customise OTC derivatives to their specific needs.[24] This is a crucial point, and it is what has inferably led to the explosive growth of this market segment globally. Secondly, and somewhat related to the first point, market participants are able to deal in large sizes, when compared to standardised products as may be readily available in an organised venue.[25] Thirdly, provided they have dimensioned their requirements, participants are able to engage in a number of transactions at once, executing a collection of trades as a single transaction (where relevant), thus achieving efficiency and moderating their transaction costs.[26] This point about costs and associated benefits was described perfectly thus: "OTC derivatives are usually preferred [to] over the exchange traded ones because taxes and other expenses are lower and they are much more flexible, meaning that the counterparties can agree on very specific or unusual conditions as opposed to the limited set of derivative types designed and operated by an exchange."[27]

Still, OTC transacting has its disadvantages. Firstly, in comparison to exchange transacting, by the very nature of OTC transactions, in the absence of mandatory reporting requirements, there is limited visibility.[28] Secondly, as highlighted by Milanesi, the instruments can be rendered less liquid and less fungible since they are often customised.[29] Lastly, and perhaps most crucial, the absence of a central clearing entity too means that counterparties to OTC transactions are more susceptible to counterparty risk.

2.4. The Products

There are "only three forms of derivative product at root: the swap, the forward and the option".[30] The crux of this proposition is that all three are forms of the option,[31] itself being a basic right on the part of the option-holder to cause a counterparty to either make or receive payment of some amount, or to make or receive delivery of some asset at some point in the future.

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[23] McDonald (n 14) at 4.
[24] Ibid.
[25] Ibid.
[26] Ibid.
[27] Vahan Nanumyan, Antonio Garas and Frank Schweitzer, 'The Network of Counterparty Risk: Analysing Correlations in OTC Derivatives' [2015] 10(9) PLOS ONE 1-23.
[28] Although, following the global financial crisis, mandatory reporting is now a requirement for certain OTC derivatives.
[29] Diana Milanesi, 'A Risk/Benefit Analysis of Central Clearing of Over-the-Counter (OTC) Derivatives and a Chaos Theory-Based Perspective on Clearing Mandates' (SJD thesis, University of California Berkeley 2017) 4.
[30] Hudson (n 6) at para 5-22.
[31] This theory is known as the "option as the core of derivatives theory". This theory sets forth the understanding that the option is the basic technique which underpins all other derivatives in the mathematics of finance theory. A forward is generally considered to be a series of options, while a swap is typically priced and structured as a series of forwards.

With cash settlement being the most used method of settlement in an option, as with other derivatives, Hudson draws a thread of fundamental similarity as being observable between all three forms of derivative. In doing this, he notes that "[the] forward, therefore, creates a synthetic option structure whereby there are two right-holders, one on each side of the contract, such that either party may be required to make a payment to the other if the underlying markets move in one way or the other", while the swap "creates a string of such payment obligations, thus creating a three-dimensional context in which a number of payment obligations are made over a longer period of time on a number of defined payment dates. Those successive payment obligations are calculated by reference to the same underlying obligation. All swaps can be analysed as being a string of forward contracts in which both parties are contingently liable to fulfil their payment obligations depending on the performance of the underlying obligation on a series of payment dates."[32]

While a fine point, the importance of emphasising it is based on two reasons. Firstly, this very crucial point sets out in a clear manner the fundamental framework upon which derivative instruments are constructed, and this then, secondly, helps maintain perspective as to how these instruments should be perceived, analysed, and regulated as they continue to proliferate.

2.4.1. Options

An option devices power for the buyer of the option to buy or sell (as may be appropriate) a specified underlying asset at a specific price at a pre-determined time in the future. An option to buy an asset is known as a "call option", while an option to sell an asset is known as a "put option". An option gives the buyer a right, but importantly, no obligation, to buy or sell at the specified price. The buyer would be required to effect a payment up-front by way of a fee to the seller to create the option. This payment is referred to as the "premium". Although the quantum of the premium would be dependent on the level of risk associated with the option, it would always be much smaller than the profit which the buyer would hope to make from the transaction and would typically be paid before the option becomes exercisable. Options can be either physically settled or as cash settled. Where options are cash settled, the buyer of the option will be entitled to receive a cash payment equivalent to the profit he would have made on the sale of the underlying asset if it was in-the-money, while under a physically settled option, the buyer would be entitled to receive actual delivery of the physical asset.

In terms of market practice, an option may be exercisable at different points in time. A European option is one which can be exercised only on a specific date. An American option can be exercised

[32] Hudson (n 6) at para 5-20.

over a specified timeframe. An Asian option can be exercised on some dates, but not others, during a desultory timeframe. In all cases, whichever option "style" is applicable to a particular transaction would be identified in the option confirmation itself. Due to the clarity as to the specific date a European option is exercisable, it presents less risk to the seller of the option.[33]

2.4.2. Forwards

A forward is a promise to supply a specific commodity, financial instrument, or other asset at an agreed price on a set date. It is crucial to highlight that a forward contract is for forward delivery only, it is not a contract for immediate or spot or cash delivery. Importantly, the buyer of a forward would be obliged to pay the purchase price for the underlying asset irrespective of whether the forward contract is in-the-money, much unlike an option where there is no such obligation to make a similar payment, but only the power to call for performance if the option is in-the-money. In other words, unlike an option, a forward obliges both parties to perform their obligations.

The price specified in a forward contract is referred to as delivery price, while the time specified is referred to as delivery date or expiration date. Since forward contracts do not require an upfront payment, as is the case with options, no money is exchanged between the counterparties until delivery. The price of a forward contract remains fixed over the duration of the contract. The spot price of the underlying asset when the contract expires is known as the future spot price. Since it would be uncertain at the time of the contract, market participants take a position in forward contracts, essentially a bet. Hull notes that structurally what happens in a forward is that the party which agrees to buy the underlying asset is referred to as having a long position, while the party which has agreed to sell the underlying asset is referred to as having a short position.[34]

2.4.3. Futures

Just like a forward, a futures contract is an agreement between two parties to buy or sell a specific asset at a pre-determined time in the future for a set price. However, the major distinguishing characteristic is that, unlike forwards, futures are typically traded on organised venues and exchanges. An exchange will typically set out standardised features for the futures contracts, in addition to a mechanism to ensure that the obligations undertaken under the futures contract will be honoured.

Futures also differ from forward contracts in that futures are not normally held to maturity as the holder of the contract can normally terminate their commitment by entering into an equal but

[33] McDonald (n 14) at 35-50.
[34] Hull (n 3) at 28.

opposite transaction at a date of their choosing. Futures also differ in that the current profit or loss on the contract is calculated daily, a process that is referred to as being marked-to-market. The buyer (or seller) must be able to provide sufficient funds (i.e., margins) to the institution to cover any losses which are calculated on this basis.

The largest futures exchanges, as at the time of writing, are by far those operated by the CME Group,[35] which owns and operates exchanges in Chicago, New York, and London, and is unarguably the world's leading and most diverse derivatives marketplace, handling three billion contracts worth approximately US$1 quadrillion annually. The CME Group's exchanges—CME, CBOT, NYMEX, and COMEX—offer the widest range of global benchmark products across all major asset classes, including futures and options based on interest rates, equity indexes, foreign exchange, energy, agricultural commodities, metals, weather, and real estate.[36]

2.4.4. Swaps

A swap is an agreement to exchange a collection of cashflows based on the value of, or return from, one asset with a collection of cashflows based on a second asset. In other words, one party will make a series of payments to the second party at specific times in the future and, in return, the second party will make a series of payments to the first. Although the exact cash flows from one party may be calculable upon entering into the contract, the cash flows in at least the other direction will not be calculable until such a time that some underlying variable is observed and then used in an agreed-upon formula to calculate the amount of cash to be exchanged at that time as a part of that cash flow series. It was described by Woolf LJ in *Hazell v Hammersmith and Fulham LBC*[37] thus:

> "[An interest rate swap is] an agreement between two parties by which each agrees to pay the other on a specified date or dates an amount calculated by reference to the interest which would have accrued over a given period on the same notional principal sum assuming different rates of interest are payable in each case."

The most common derivative contracts are interest-rate swaps and currency swaps. An entity may enter an interest-rate swap to effectively exchange a variable (usually described as "floating") rate of interest for a fixed rate or exchange a fixed rate for a variable rate. By way of illustration: a company takes out a loan with a floating rate of interest. Due to potential changes in interest rates, it then takes out an interest rate swap, so that it makes fixed payments (as opposed to variable payments). The net consequence would be the same as if it had borrowed at a fixed rate of interest.

[35] Evelyn Cheng, 'Bitcoin Debuts on the World's Largest Futures Exchange and Prices Fall Slightly' *CNBC* (Beijing 17 December 2017) <https://www.cnbc.com/2017/12/17/worlds-largest-futures-exchange-set-to-launch-bitcoin-futures-sunday-night.html> accessed 15 October 2018.
[36] See "CME Group: Corporate Overview", available at: <https://www.cmegroup.com/company/history/>.
[37] [1991] 1 All E.R. 545 at 550.

If it ends up paying less interest than it receives under the swap agreement, the contract is referred to as being in-the-money. Under a cross currency swap, however, parties exchange interest payments on an amount denominated in one currency for interest on an amount denominated in a second currency. An entity would normally enter a cross currency swap to protect itself from the adverse consequences that a rise or fall in the value of a relevant foreign or domestic currency might have upon its business or venture.

2.4.5. Other Products: Securitisation Vehicles

Rising in tandem with the market for derivatives is the structured finance[38] space particularly securitisation,[39] a "financing technique by which homogeneous income-generating assets—which on their own may be difficult to trade—are pooled and sold to a specially created third party, which uses them as collateral to issue securities and sell them in financial markets."[40] While the description of securitisation vehicles as 'derivatives' could be contended based on differences between these products and derivatives which have been described above, Awrey submits that structured finance products "do clearly fall within the generic definition of a derivative as a financial contract the value or expected performance of which is linked to another, underlying, asset."[41]

Securitisation is either *traditional* or *synthetic*. The major underlying theme is that (i) financial assets are pooled together, (ii) the credit risk of those financial assets is decoupled from the credit risk of the entity to which they are owed, and (iii) the cash flow from the financial assets are employed to repay an investment.[42] A rough structure can be described as follows: a sponsoring

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[38] This refers to financing structures where special-purpose vehicles are used, such as project finance, securitisation, leasing transactions, etc. The common feature of structured finance transactions is that the transaction is structured to redistribute or reallocate the risk of specific collateral among different classes of investors via the adoption of a structure. For a helpful global overview, see, generally, IOSCO, *Global Developments in Securitisation Regulation* (2012) <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD394.pdf> and BOE and ECB, *The Case for a Better Functioning Securitisation Market in the European Union* (2014) <https://www.ecb.europa.eu/pub/pdf/other/ecb-boe_case_better_functioning_securitisation_marketen.pdf>.

[39] See generally Vincenzo Bavoso, 'Financial Innovation and Structured Finance: The Case of Securitisation' [2013] The Company Lawyer 34(1) 3-12.

[40] European Parliamentary Research Service, *Understanding Securitisation: Background, Benefits, Risks* (2015) <http://www.europarl.europa.eu/RegData/etudes/IDAN/2015/569017/EPRS_IDA%282015%29569017_EN.pdf> 4 accessed 29 November 2018.

[41] Dan Awrey, 'Complexity, Innovation and the Dynamics of OTC Derivatives Regulation' (PhD thesis, Oxford University 2012) 66.

[42] Asia Securities Industry and Financial Markets Association (ASIFMA), *ASIFMA – Securitization in Asia 2015* (2015) <http://www.asifma.org/uploadedFiles/Resources/Final%20Securitization%20Pitchbook%20(MASTER)%20-%205%20Oct%202015.pdf> 9 accessed 29 November 2018.

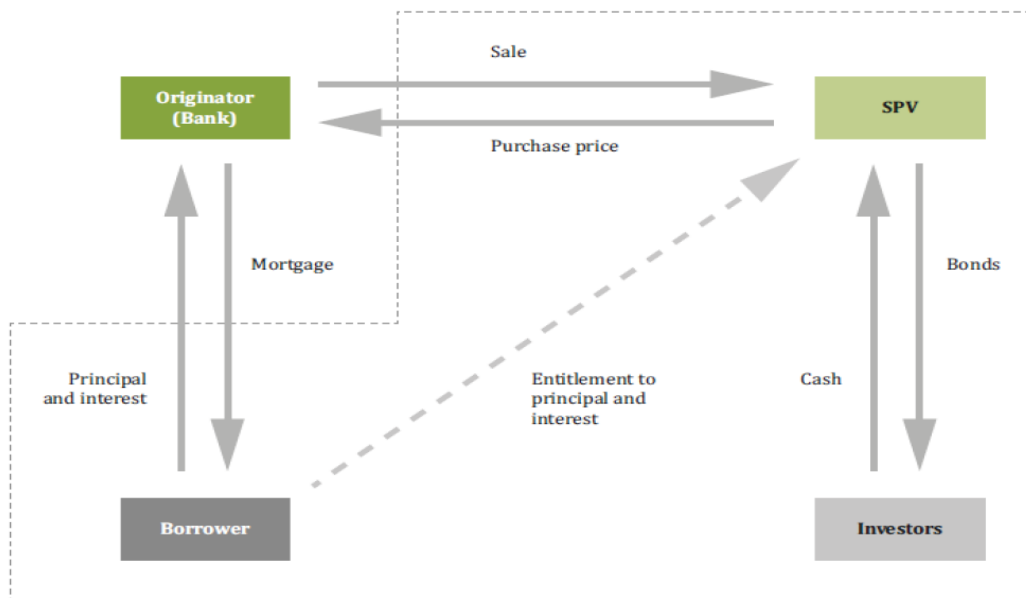
bank makes out loans. Once it has made out a certain amount of loans, the sponsoring bank then sells the pool of loans to an SPV. The SPV, which would have been specifically established for the securitisation, would have no physical location or employees and would indeed not be subject to banking rules.[43] The SPV will then slice the asset pools in tranches, and on-sell them to investors.[44] The pooled assets may be either purchased from the secondary markets or transferred from the balance sheet of the sponsoring bank. These assets are funded *via* the issuance of debt securities or notes, the repayment of which would then be linked to the performance of the pooled assets.

There are two main product-types under a traditional securitisation: ABSs and CDOs. ABSs are products whose collateral is underpinned by mortgage loans (these are referred to as MBS) or from other types of financial assets (i.e., non-mortgage securities such as car loans and future returns on copyrights). CDOs are products whose collateral pool would typically be underpinned by, bonds, loans, or other types of debt, as well as by asset-backed securities. It should be noted that this term covers products such as CBOs,[45] CLOs,[46] and CFOs.[47]

Synthetic securitisations are transactions whereby financial entities use credit derivatives to transfer just the credit risk of the asset pool to the third parties, and not the assets themselves. The idea for this, as has been noted is that "many investors are not concerned whether or not the underlying assets are the 'property' of the [SPV], but rather that they receive cash flows from the security as if the [SPV] actually owned them."[48] The transfer is effected with the originator ("protection buyer") issuing credit-linked notes to the SPV, or directly to investors. In the alternative, the protection buyer could enter into a credit derivative, such as a CDS, with a counterparty ("protection seller"), under which the latter would agree, in return for specific payments, that upon the occurrence of a credit event related to the portfolio of assets, the protection seller will pay an amount to the protection buyer. Figure 2.1. which follows outlines a basic securitisation structure.

Figure 2.1.: A basic securitisation structure

[43] The SPV would be thinly capitalised, with its equity held by a trust or by a charitable foundation, to avoid consolidation of its assets with the sponsor.
[44] Clemens Bonner, Daniel Streitz and Michael Wedow, *On the Differential Impact of Securitisation on bank Lending During the Financial Crisis* (2016) DNB Working Paper No. 501 <https://www.dnb.nl/binaries/Working%20paper%20501_tcm46-338349.pdf> 3 accessed 29 November 2018.
[45] These products are investment-grade bonds backed by a pool of 'junk' bonds.
[46] These are products backed by a pool of debt, often low-rated corporate loans
[47] These are products backed by a pool of hedge fund investments.
[48] European Parliamentary Research Service (n 41), at 7.



Source: Asia Securities Industry and Financial Markets Association (ASIFMA), *ASIFMA – Securitization in Asia* (2015) <http://www.asifma.org/uploadedFiles/Resources/Final%20Securitization%20Pitchbook%20(MASTER)%20-%205%20Oct%202015.pdf >

Structured finance allows financial entities trade otherwise non-marketable products and demise the credit risk from subsisting loans onto investors who wish to bear it. Indeed, Brunnermeier argues that this risk diversification allows for lower interest rates on loans and mortgages,[49] while Nadauld and Weisbach posit that securitisation reduces the price of corporate debt.[50]

This, of course, does not mean that securitisation has not been without its problems, with Higgs describing it as having seen a "spectacular fall from grace"[51] and Stiglitz declaring that it was "based on the premise that a fool was born every minute".[52] Carpio *et al* outline the causes of issues which led to the 'fall' of securitisation around the GFC as being connected to the "concerted effort to squeeze tranches of highly rated claims out of pools of low quality assets", thus "making tranches claims difficult to value and susceptible to sudden changes in risk perception"—with the fundamental problem, however, being "outsourcing [of] the funding side of an originator's balance sheet", thus disincentivising it from the obligation to properly monitor the quality of the loans it originates.[53]

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[49] Markus Brunnermeier, 'Deciphering the 2007-08 Liquidity and Credit Crunch' [2009] 23(1) Journal of Economic Perspectives 77-100.
[50] Taylor Nadauld and Michael Weisbach, 'Did Securitization Affect the Cost of Corporate Debt? [2012] 105(2) Journal of Financial Economics 332-352.
[51] Will Higgs, 'Restoring Confidence in the Securitisation and Derivatives Markets' [2009] 3(4) Law and Financial Markets Review 342-347.
[52] Joseph Stiglitz, Testimony before the House Committee on Financial Services, 21 October 2008 <policydialogue.org/files/events/Stiglitz_Testimony_before_the_House_Committee_on_Financial_Services.pdf> accessed 3 December 2018.
[53] Gerard Caprio, Asli Demirgüç-Kunt and Edward Kane, 'The 2007 Meltdown in Structured Securitisation: Searching for Lessons not Scapegoats' [2010] 25(1) The World Bank Research Observer 125-155.

2.5. The Product Traders and Users

As far as trading of derivative products is concerned, while the players are motivated by different objectives, one attraction for all of them is the liquidity of derivatives markets, ensuring that an investor can be virtually certain that there will always be someone on the other side of a trade.[54] Accordingly, these players fall into three broad categories: (a) hedgers, (b) speculators, and (c) arbitrageurs.

2.5.1. Hedgers

This class of product users use derivatives either to hedge risk or attempt to eliminate it in totality, entering these financial contracts to safeguard or preserve their positions from adverse market movements, whether it be price or rate. For example, a large corporate might enter an interest rate swap to hedge risk on a bond issue, while an asset manager might invest in an equity index by purchasing a call option.

2.5.2. Speculators

Unlike the hedgers who take what one may describe as a defensive or preventative measure to seek to safeguard or preserve financial positions, there are a class of product users who are driven by an active pre-occupation to take positions for the purpose of achieving profit. In short, these ones are either betting that the price of an asset will go up or down. Either futures or options can be traded with speculative intent. It is however important to note that the difference between hedging and speculation can be difficult to determine.[55]

2.5.3. Arbitrageurs

This class of product users, often sophisticated, in the derivatives markets take advantage of price disparities and imperfections between markets by entering simultaneous transactions and exploiting information asymmetries in a risk-free manner. Mismatches between futures and spot prices will also create arbitrage opportunities which players in this category can take advantage of. Where prices diverge, these market players buy in cheaper markets with a view to selling in more expensive markets.

2.5.4. Criticism of Categorisation of Product Traders and Users

[54] Hull (n 3) at 33.
[55] See *Standard Chartered Bank v Ceylon Petroleum Corp* [2012] EWCA Civ 1049, *Credit Suisse International v Stitching Vestia Groep* [2014] EWHC 3103 (Comm), and *Banco Santander Totta SA v Companhia Carris de Ferro de Lisboa SA* [2016] EWHC 465 (Comm).

Notwithstanding how the traders of derivative products are described or characterised, the question as to whether, fundamentally, these participants are not all making a bet arises, thus casting doubts over the utility of these fine categorisations.[56] 'Hedging', for example which is supposed to be most concerned with strategic risk management as opposed to basic speculation, is actually a *bet* that another financial instrument will show a profit if a first instrument shows a loss, thus offsetting the loss. This is so because in seeking to eliminate risks, fresh risks could very well be created by the value of a hedge deteriorating due to unforeseen market movements. Given that a hedge is itself a financial instrument, its market value will invariably fluctuate, so, in other words, entering a hedge is itself a bet. 'Arbitrage', just as similarly, is a *bet* too that a commercial dynamic or state of financial affairs will remain in the same state upon the consummation of a transaction such that a profit will be generated; it is possible however that the commercial dynamic or state of financial affairs which induced the decision to engage in the arbitrage activity could change.[57]

2.6. Overview of Global Market Activity

A top line overview of the global derivatives market is best gleaned from the BIS database.[58] The derivatives statistics reported by the BIS extends from derivatives traded on organised exchanges to outstanding positions in the OTC derivatives markets and turnover in foreign exchange and OTC interest rate derivatives markets. Together, these provide insight into the size and makeup of the global derivatives markets. The global derivatives market, having taken off in a phenomenal manner, extends to a diverse collection of asset classes, as indicated below in Figure 2.2. The ISDA database too provides a wealth of information.

Globally and historically, there are five principal asset classes which market participants largely play in: interest rate derivatives (IRDs), FX derivatives, equity derivatives, commodity derivatives, and credit derivatives. As indicated below in Figures 2.2., 2.2(a), and 2.3 and underscoring the

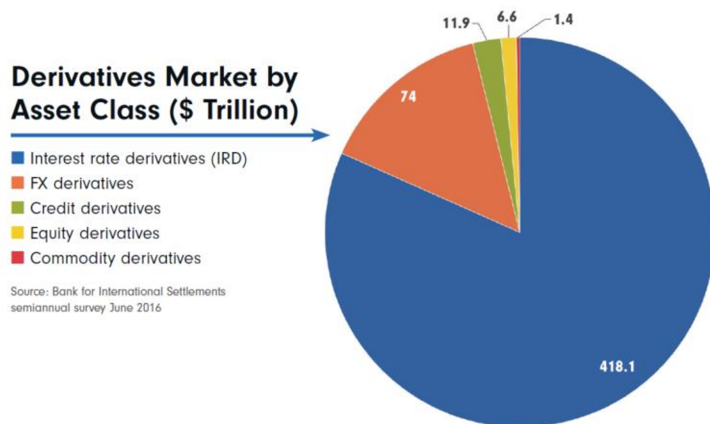
[56] It is important to emphasise that this is not a criticism of the usefulness or utility of these derivative products. Far from it, indeed, it would be financial malpractice not to enter into an interest rate derivative to hedge interest rate risks, where pertinent and an entity is able to do so, for example. What is being questioned is the *utility* of these categorisations.

[57] Steven Schwarcz, 'Central Clearing of Financial Contracts: Theory and Regulatory Implications' [2019] 167(6) University of Pennsylvania Law Review 1327-1373 ("… *all financial contracts are bets.* A loan agreement is a bet by a lender that the borrower will repay the loan on a timely basis, with interest. Even a simple guarantee is a bet by the guarantor, in consideration of a guarantee fee, that the guaranteed obligation will not default") (*emphasis added*).

[58] Established on 17 May 1930, the BIS is the world's oldest international financial organisation. As reported on its website, the BIS has 60-member central banks, representing countries from around the world that together make up about 95% of world GDP. It: (a) facilitates dialogue and collaboration among central banks and other authorities that are responsible for promoting financial stability; (b) conducts research on policy issues confronting central banks and financial supervisory authorities; (c) acts as a prime counterparty for central banks in their financial transactions; and (d) serves as agent or trustee in connection with international financial operations. For more information, see: https://www.bis.org/about/profile_en.pdf

importance of the management of interest rate risk associated with debt, IRDs are by a great degree the most important asset class. Activity in global derivatives markets is led by a small collection of dealers known as the G14, who had around US$550 trillion of notional outstanding interest rate derivatives as at May 2011.[59] Most of the transactions are within the G14, with transactions with non-G14 counterparties making up just 25% of 'outstandings'.[60] The US and the UK are the leading global centres for OTC derivatives, with IRDs being the most traded instruments, as depicted in Figure 2.2.

Figure 2.2.: Total derivatives notional outstanding: $544 trillion at end of June 2016

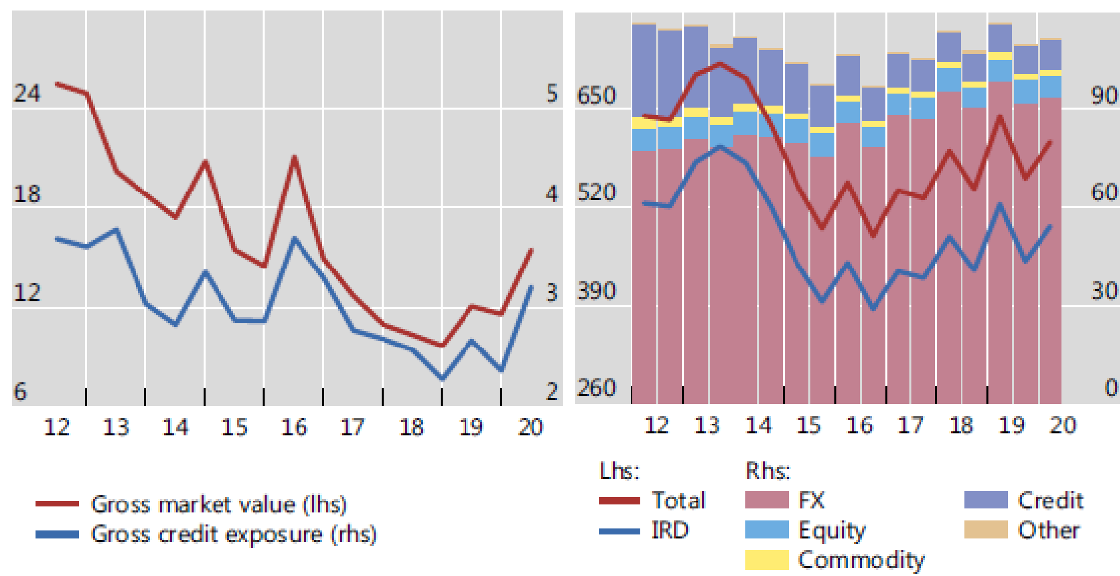


Source: International Swaps and Derivatives Association, *Derivatives – Facts and Figures* (2017) <https://www.isda.org/a/sviDE/derivatives-facts-and-figures-fact-sheet-final.pdf >

Figure 2.2(a): Gross market value of OTC derivatives in H1 2020

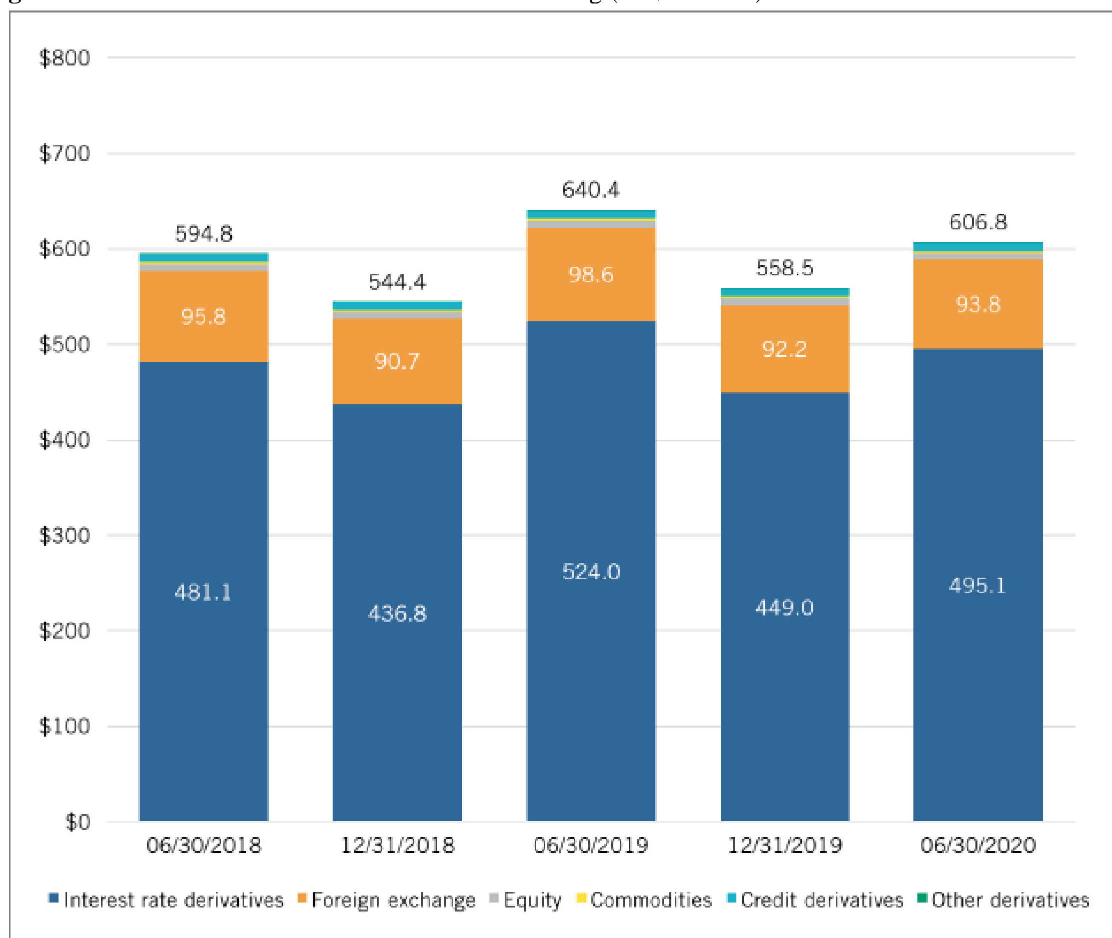
[59] These entities are Bank of America–Merrill Lynch; Barclays Capital; BNP Paribas; Citi; Credit Suisse; Deutsche Bank AG; Goldman Sachs & Co; HSBC Group; J.P. Morgan; Morgan Stanley; The Royal Bank of Scotland Group; Société Générale; UBS AG; Wells Fargo Bank, N.A.

[60] Reserve Bank of Australia, *Central Clearing of OTC Derivatives in Australia* (June 2011) <https://www.rba.gov.au/publications/consultations/201106-otc-derivatives/pdf/201106-otc-derivatives.pdf> accessed 1 January 2019.



Source: BIS, Statistical Release: OTC Derivatives Statistics at End-June 2020

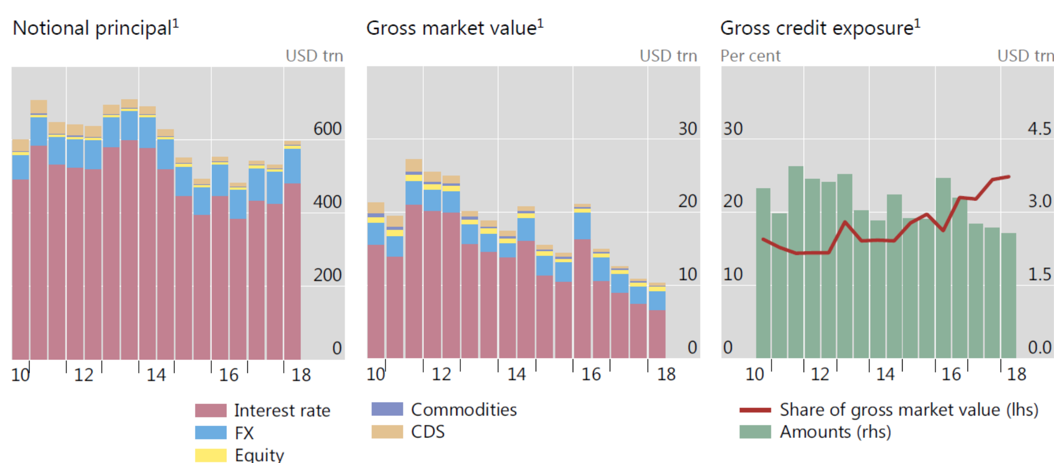
Figure 2.3.: Global OTC derivatives notional outstanding (US$ trillions)



Source: BIS, Statistical Release: OTC Derivatives Statistics at End-June 2020

Pivoting back to the global picture, as at June 2018, according to the BIS,[61] the notional value of outstanding OTC derivatives increased from $532 trillion to $595 trillion as at end of June 2018, propelled largely by US dollar interest rate contracts, particularly short-term contracts. The gross market value of outstanding derivatives contracts, though, declined to $10 trillion, its lowest level since 2007.[62] The quantum of outstanding OTC derivatives that dealers cleared through CCPs held steady, at around 76% for interest rate derivatives and 54% for CDS.[63] The increase in notional amounts outstanding was driven principally by OTC interest rate derivatives, especially for US dollar-denominated contracts, which rose from $157 trillion at the end of 2017 to $193 trillion at the end of June 2018, as outlined in Figure 2.4. below.[64] In addition, an increase in US dollar activity was observed in the ETD markets, where the average daily turnover of futures and options on dollar interest rates climbed to $9.6 trillion in February 2018. The notional amounts outstanding of euro-denominated interest rate derivatives also increased over this period, albeit modestly, from $122 trillion to $129 trillion.[65]

Figure 2.4.: Global OTC derivatives market: Outstanding positions at end-June 2018



CDS: credit default swaps; FX: foreign exchange derivatives
Source: BIS, *Statistical Release: OTC Derivatives Statistics at End-June 2018* (31 October 2018) <https://www.bis.org/publ/otc_hy1810.pdf>

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[61] BIS, *Statistical Release: OTC Derivatives Statistics at End-June 2018* (31 October 2018) <https://www.bis.org/publ/otc_hy1810.pdf> accessed 5 November 2018.
[62] Ibid. The afore-referenced report notes that this decline reflected "on-going structural changes" in the OTC derivatives market.
[63] Ibid. A CDS involves a buyer paying regular premiums to a seller who agrees to a specific disbursement on a stated credit event, for example a bankruptcy. Where there is an insurable interest the term covered swap applies. However, where the buyer has no such interest, a naked swap arises, typically for speculation, or for shorting an asset (bringing a company down by purporting to buying credit protection, often connected to with basic shorting).
[64] Ibid.
[65] Ibid.

Gross credit exposures, which adjust gross market values for legally enforceable bilateral netting agreements, remained stable at $2.6 trillion at end of June 2018.[66] With regard to OTC foreign exchange (FX) derivatives markets, notional amounts rose to $96 trillion at end of June 2018, up from $87 trillion at end of December 2017.[67] According to the BIS, notional amounts of CDS continued to decline, owing to decreased activity between reporting dealers. From end of June 2016 to end of June 2018, total notional amounts dropped from $12 trillion to $8 trillion, amounts *vis-à-vis* reporting dealers declined from $5 trillion to $2 trillion, and amounts *vis-à-vis* CCPs remained steady around $4.5 trillion.[68] In OTC interest rate derivatives markets, however, the proportion of contracts cleared was also steady in the first half of 2018, at around 76% overall.[69] Across currencies, the proportion ranged from 73% for euro interest rate contracts to 77% for US dollar contracts and 89% for Canadian dollar contracts.[70] As at June 2020, however, the notional amount of outstanding OTC derivatives contracts stood at $606.8trillion while gross market value of outstanding OTC derivatives contracts stood below $15.5 trillion as at June 2020.[71]

2.7. Netting

Netting is the "offsetting of obligations between or among participants in [a] netting arrangement, thereby reducing the number and value of payments or deliveries needed to settle a set of transactions".[72] Bilateral netting thus connotes two counterparties consolidating their respective trades into a single net amount payable either way. This is, of course, different to multilateral netting, a major feature of the CCP, which is the "offsetting of obligations between or among multiple participants to result in a single net position per participant."[73] Multilateral netting allows a CCP reduce its net total exposure in derivatives transactions and also reduce systemic risk in the financial markets.[74,75]

The process helps eliminate pleonastic derivative contracts and simplifies interconnections and relationships between transaction counterparties. Consequently, assets and liabilities are guaranteed

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[66] Ibid.
[67] Ibid.
[68] Ibid.
[69] Ibid.
[70] Ibid.
[71] BIS, *Statistical Release: OTC Derivatives Statistics at End-June 2020*.
[72] ECB, Glossary of Terms Related to Payment, Clearing and Settlement Systems (2009) 5 <https://www.ecb.europa.eu/pub/pdf/other/glossaryrelatedtopaymentclearingandsettlementsystemsen.pdf>
[73] Ibid.
[74] Manmohan Singh, 'Collateral, Netting and Systemic Risk in the OTC Derivatives Market' [2010] *IMF Working Paper* 8 <https://www.imf.org/external/pubs/ft/wp/2010/wp1099.pdf> accessed 13 March 2019.
[75] Mattia Montagna, Gabriele Torri, Giovanni Covi, 'On the Origin of Systemic Risk' [2020] Working Paper Series ECB.

by a CCP and counterparty risk is mitigated in the market.[76] Though it is highlighted that these benefits depend on the existence of two things.[77] One, the existence of standardised contracts to alleviate operational costs and to facilitate the close-out of the relevant positions in case a clearing member defaults and, two, the absence of fragmentation (i.e., clearing of the same exposure on different CCPs).

One of the aims of financial regulation post the GFC is the imperative to supply the public good of financial stability by mitigating or eliminating financial market risks. Credit risk is one of the more prominent of these risks, as it carries with it the potential for market participants to suffer losses in the event of a counterparty's default. It is settled in modern financial markets, particularly derivatives markets, that netting is one of the best mechanisms used to eliminate these risks,[78] because they "have a direct effect on the profitability of transactions, as well as reducing the loss that would be suffered in the event of default."[79] Netting helps "[reduce] the credit risk involved in a series of transactions so that the net value of the transactions represents the maximum loss that can be suffered in relation to them as a result of a default."[80] Thus, netting helps engender efficiency (the obligation to make one payment or delivery is more efficient than making multiple payments or deliveries) and guards against settlement risk (i.e. *Herstatt* risk), counterparty credit risk, and systemic risk.

There are two major netting techniques: (1) payment/settlement netting; and (2) close-out netting. The former is operative in the normal course of business between solvent counterparties, while the latter is operative in the context of insolvent counterparties. Payment/settlement netting is typically aimed at facilitating efficient settlement and reducing settlement risk and involves neutralising cash flow obligations between parties into a single net payable or receivable. It is close-out netting—which would typically be activated—following an event of default or termination event that is the focus here, as it is regarded as "the legal mechanism underlying the largest part of modern wholesale financial services."[81]

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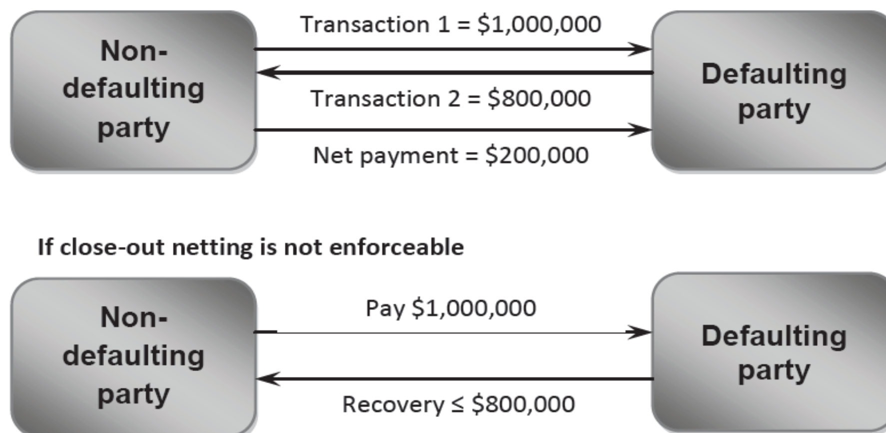
[76] Elisabeth Ledrut and Christian Upper, 'Changing Post-trading Arrangements for OTC Derivatives' [2007] *BIS Quarterly Review* 91 <https://www.bis.org/publ/qtrpdf/r_qt0712i.pdf> accessed November 26, 2018.
[77] Joseph Tanega and Andrea Savi, 'Central Clearing Counterparties for OTC-Users: A Theoretical Framework' [2017] 13(3) New York University Journal of Law and Business 825-883.
[78] Joanna Benjamin, 'The Narratives of Financial Law' [2010] 30(4) Oxford Journal of Legal Studies 787-814 ("Whatever the future narrative of financial law, it will turn on netting, because the financial markets will turn on derivatives.")
[79] Simon Firth, *Derivatives: Law and Practice* (London: Sweet & Maxwell 2017) 5-1.
[80] Ibid.
[81] Philipp Paech, 'Enforceability of Close-Out Netting: Draft UNIDROIT Principles to Set New International Benchmark' [2013] 1 Butterworths Journal of International Banking and Financial Law 13-19.

The ISDA Master Agreement which sets out standardised language on rights, obligations, and mechanics of derivative transactions is typically used to document these contracts. Two of the important terms it provides for in section 5 are (a) events of default and (b) termination events. The events of default under the agreement are failure to pay or deliver,[82] breach or repudiation of agreement,[83] credit support default,[84] misrepresentation,[85] default under specified transaction,[86] cross default,[87] bankruptcy,[88] and merger without assumption.[89] Termination events under the agreement are illegality,[90] tax event,[91] tax event upon a merger,[92] credit event upon a merger,[93] and additional termination event.[94] As set out in the *2018 ISDA Model Netting Act and Guide*, [95] following these, or a termination event, the following stages kick in:

> "(a) Transactions under the netting agreement are terminated by notice given by the non-defaulting party or, in certain circumstances, automatically; (b) The terminated transactions are valued at their current mark-to-market value (that is, replacement value) at or about the time of early termination. (c) A net balance is calculated equal to the difference between (i) the aggregate mark-to-market value of terminated transactions "in the money" to the non-defaulting party and (ii) the aggregate mark-to-market value of terminated transactions "out of the money" to the non-defaulting party. If (i) exceeds (ii), the net amount is paid to the non-defaulting party. If (ii) exceeds (i), the net amount is, normally, paid to the defaulting party."

Figure 2.5.: Close-out netting under the ISDA Master Agreement



Source: David Mengle, 'The Importance of Close-Out Netting' [2010] ISDA Research Notes No 1 2.

[82] 5(a)(i) of 2002 ISDA Master Agreement.
[83] 5(a)(ii) of 2002 ISDA Master Agreement.
[84] 5(a)(iii) of 2002 ISDA Master Agreement.
[85] 5(a)(iv) of 2002 ISDA Master Agreement.
[86] 5(a)(v) of 2002 ISDA Master Agreement.
[87] 5(a)(vi) of 2002 ISDA Master Agreement.
[88] 5(a)(vii) of 2002 ISDA Master Agreement.
[89] 5(a)(viii) of 2002 ISDA Master Agreement.
[90] 5(b)(i) of 2002 ISDA Master Agreement.
[91] 5(b)(iii) of 2002 ISDA Master Agreement.
[92] 5(b)(iv) of 2002 ISDA Master Agreement.
[93] 5(b)(v) of 2002 ISDA Master Agreement.
[94] 5(b)(vi) of 2002 ISDA Master Agreement.
[95] See "2018 ISDA Model Netting Act and Guide", available at: <https://www.isda.org/a/X2dEE/FINAL_2018-ISDA-Model-Netting-Act-and-Guide_Oct15.pdf>.

The effectiveness or otherwise of a financial market is connected to the robustness of the legal framework underpinning that market, and one of the major pillars (of any legal framework) which must be appropriately crafted, to this end, are the jurisdiction's bankruptcy and insolvency laws and regulations. IOSCO generally points to three factors which must be in existence under this head: (a) rights of security holders on winding up, (b) rights of clients on insolvency of intermediary, and (c) netting, which is the most relevant to this work.[96]

2.8. Central Clearing Counterparty

An important component in the financial market infrastructure value chain is the entity known as the CCP.[97] While these entities have been in existence in the broader financial ecosystem for quite a while[98] (central counterparty clearing indeed initially developed in the commodity markets space[99]), it was not until the advent of the GFC that they gained more prominence, with the markets infrastructure ecosystem now looking to these infrastructures to help reduce counterparty risk and mitigate systemic risk.[100] CCPs evolved from clearinghouses, with counterparty substitution arising in the late 19th century in response to the imperative for commercial interests to find a means of risk management for specific commodity trading risk.[101]

The culmination of the GFC—with the failures of Bear Stearns, Lehman Brothers, and AIG in 2008—brought derivatives and the notion of clearing to the foreground of legal and regulatory attention. Now while the GFC itself was primarily caused by structured credit-linked securities, derivatives *did* play a key role in its culmination and effects. Duffie highlights that the "financial crisis was exacerbated by derivatives markets",[102] with Firth agreeing, noting, in addition, that even though "the problems at the heart of the financial crisis originated outside the derivatives market,

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[96] IOSCO, *Objectives and Principles of Securities Regulation* (May 2003) 68 <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD154.pdf> accessed 31 October 2019.
[97] Gary Gorton, 'Clearinghouses and the Origin of Central Banking in the United States' [1985] 45(2) Journal of Economic History 277-283 (noting that clearinghouses emerged with the shift in the importance of banking products and that the first one was established by New York City banks in 1853).
[98] See Joseph Tanega and Andrea Savi (n 79) for a robust construction of a theoretical framework in relation to CCPs. In particular, the work traces the historical evolution of the concept of clearing.
[99] Peter Norman, *The Risk Controllers, Central Counterparty Clearing in Globalised Financial Markets* (John Wiley & Sons 2011) 51.
[100] The notion and role of counterparty risk and systemic risk in the post GFC financial ecosystem particularly as it relates to regulation are considered below, respectively. Indeed, these two notions are central to the conceptualisation of a regulatory framework as it relates to derivatives.
[101] See Norman (n 103).
[102] Darrell Duffie, 'How Should We Regulate Derivatives Markets?' (25 August 2009) (PEW Financial Reform Project, Briefing Paper No. 5) 5 <https://www.pewtrusts.org/en/research-and-analysis/reports/2009/08/25/how-should-we-regulate-derivatives-markets> accessed 14 November 2018.

derivatives were the route to their transmission to other institutions and into the wider economy."[103] In any event, experts agree that there were multiple causes.[104]

In response, in 2009, G20 leaders committed to reforming the overall structure of the global financial order and one key initiative was the reform of the derivatives market, with a view to improving transparency and reducing risk. To this end, as discussed in chapter 1, at the meeting in Pittsburgh, G20 leaders made the following commitments in regulating the derivatives market: (a) all standardised OTC derivative contracts should be traded on exchanges or electronic trading platforms, where appropriate, and cleared through CCPs; (b) OTC derivatives contracts should be reported to central trade repositories; and (iii) non-centrally cleared contracts should be subject to higher capital requirements. In addition, the FSB was empowered with the authority to monitor and oversee the process of implementing of the foregoing commitments.[105] These commitments have spurned regulatory and legislative reaction globally, all typified by different infrastructures, approaches, and results. While the *Recommendations for Central Counterparties*, which detailed the comprehensive risk management standards for CCPs aimed to address all the major types of risk that CCPs may encounter had been published by the CPSS-IOSCO in 2004, it was not until 2012 that IOSCO published recommendations on requirements for mandatory central clearing.[106]

So, *what, then, is a CCP*? It is an "entity that interposes itself between counterparties, known as clearing members, to contracts traded in one or more financial markets, becoming the buyer to every seller and the seller to every buyer and thereby ensuring the performance of open contracts."[107] It has also been described as a "commitment mechanism",[108] saddled with the ultimate task of ensuring the performance of contractual obligations between clearing members, who have contractually entered into the CCP scheme in order to clear financial transactions they have executed with each other. Clearing entails "the process of transmitting, reconciling and, in some cases, confirming transfer orders prior to settlement, potentially including the netting of orders and the establishment of final positions for settlement. Sometimes this term is also used (imprecisely)

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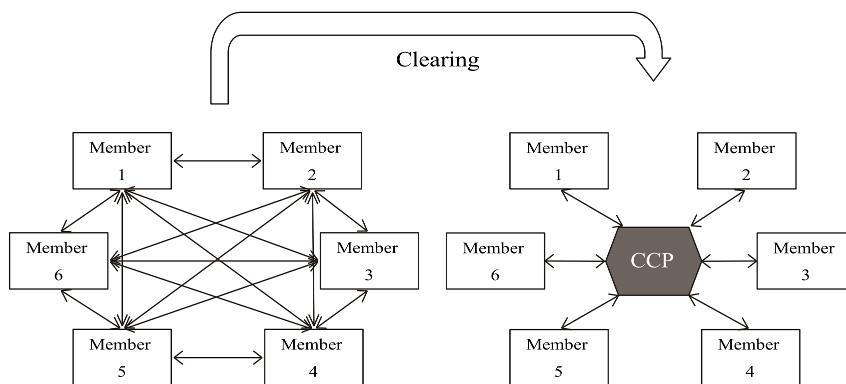
[103] Firth (n 81) 1-26.
[104] Lynn Stout, 'Derivatives and the Legal Origin of the 2008 Credit Crisis' [2011] 1 Harvard Business Law Review 1-38 ("What caused the crisis? Many factors may have contributed. Possible culprits include loose monetary policy, weakened lending standards in the mortgage industry, rating agencies' failure to investigate the soundness of the securities they were rating, the loosening of legal restrictions on banks' "proprietary trading" for their own accounts, and the decision by many Wall Street firms to abandon traditional partnership structures and incorporate, thus shifting risk onto the shoulders of public investors.")
[105] G20 Leaders' Statement, The Pittsburgh Summit, 24–24 September 2009.
[106] IOSCO, *Requirements for Mandatory Clearing* (2012) <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD374.pdf>.
[107] Committee on Payment and Settlement Systems, *A Glossary of Terms Used in Payments and Settlement Systems* (2016) <https://www.bis.org/cpmi/publ/d00b.htm?&selection=9&scope=CPMI&c=a&base=term>.
[108] Robert Cox and Robert Steigerwald, *A CCP is a CCP is a CCP* (April 2017) Federal Reserve Bank of Chicago 1 <https://www.risk.net/journal-of-financial-market-infrastructures/5708846/a-ccp-is-a-ccp-is-a-ccp> accessed 14 November 2018.

to cover settlement. With respect to the clearing of futures and options, this term also refers to the daily balancing of profits and losses and the daily calculation of collateral requirements".[109] The process of clearing gives rise to rights and obligations between the clearing members and the CCP.

After two parties execute a derivatives transaction, the CCP steps in, *via* "novation",[110] becoming the seller to the original buyer and the buyer to the original seller. In other words, the CCP "guarantees the 'termination' of any position in fungible executory contracts with [standardised] terms that any of the clearing members may desire." [111] A CCP interposes itself between entities which owe each other; its principal operations involve risk management (which includes default procedures), clearing and settlement, and collateral arrangements. After the CCP interposes itself between the original parties, it then functions as an intermediary by guaranteeing the performance of the parties to the transaction. To this end, it establishes and enforces a set of rules and operational arrangements aimed at allocating, managing, and reducing counterparty risk connected to the transaction.[112] Additionally, CCPs monitor the counterparties' rights and obligations, keep track of payments, calculate relevant net positions, collect trade data, before occasioning settlement—all with a view to mitigating counterparty risk. Figure 2.6. which follows illustrates counterparty risk interconnections with and without central clearing.

Figure 2.6.: Illustration of counterparty risk interconnections with and without central clearing



Source: Ignacio Ruiz, *XVA Desks — A New Era for Risk Management: Understanding, Building and Managing Counterparty, Funding and Capital Risk* (Palgrave Macmillan UK 2015) pp. 331-344

[109] ECB (n 74).
[110] Simply put, "novation" is a contractual arrangement. It is a means of transferring a party's rights and obligations under a contract to a third party. Strictly speaking, the original rights and obligations are not transferred; rather, novation extinguishes one contract and replaces it with another, under which a third party takes up rights and obligations duplicating those of one of the parties to the original contract. Novation is, in effect, a form of assignment in which, by the consent of all parties, a new contract is substituted for an existing contract. Usually, but not necessarily, a new person becomes party to the new contract, and some person who was party to the old contract is discharged from further liability.
[111] Christian Chamorro-Courtland, 'The Legal Aspects and Operations of 'Central Counterparty (CCP)' Clearing Systems' (PhD thesis, York University 2012) 16.
[112] One of the principal functions of a CCP is to reallocate counterparty risk in an insolvency scenario by mutualising default losses amongst clearing members and the CCP itself.

Distilling all the foregoing, in terms of functions, a CCP does the following: (a) trade confirmation, (b) position/exposure management, (c) delivery management, (d) discharging multilateral netting functions, (d) membership management, (e) risk management and (f) default management. Globally, clearing is a particularly important element in the derivatives trading value-chain both from a regulatory perspective and operational perspective and will continue to remain so.

2.8.1. CCP v. Clearing House

Before going further, it is crucial to shed some light on the difference between a CCP and a clearing house. While not a particularly important point from the perspective of a developed financial market such as one would encounter in either the US or the UK, it is a very important point from the perspective of a developing financial market such as Nigeria, as it goes to the ability or otherwise of a clearing entity to assure legal certainty in a derivatives market. Recall that in chapter 1, in employing appurtenant infrastructure as an analytical tool in this work, we focus on the extent to which extant Nigerian law and regulation (a) engenders legal certainty and (b) accentuates transactional efficacy. [113]

Even though the phrases 'CCP' and 'clearing house' are used interchangeably in general financial parlance,[114] the ECB outlines separate and distinct definitions for the terms.[115] In particular, CCP is defined thus:

> "an entity that interposes itself, in one or more markets, between the counterparties to the contracts traded, becoming the buyer to every seller and the seller to every buyer and thereby guaranteeing the performance of open contracts."[116]

A clearing house is defined thus:

> "a common entity (or a common processing mechanism) through which participants agree to exchange transfer instructions for funds, securities or other instruments. *In some cases, a clearing house may act as a central counterparty for those participants, thereby taking on significant financial risks*" (*emphasis added*).

Principally, the difference between both types of animals is that while a CCP will interpose itself between counterparties, a clearing house will not; although this does not mean that it cannot. To

[113] See chapter 1 at 1.2.
[114] Indeed, in *British Eagle International Airlines Ltd v Compagnie Nationale Air France* [1975] 2 All ER 390 (HL) and *International Air Transportation Association (IATA) v Ansett* [2008] HCA 3 both terms were conflated.
[115] See n 74 above.
[116] Ibid.

put it as Chamorro-Courtland described: "an ordinary **clearing house** operates as the "agent" of the clearing members in the clearing process and it does not perform 'counterparty substitution'".[117] Where there has been no counterparty substitution by the clearing entity, it follows that the legal rights which flow are different: the clearing house is merely an *agent*, while the CCP becomes the *principal*.

For developed markets such as those in the UK and US, the insignificance of this point is apprehensible because generally every CCP is a clearing house. For developing markets such as Nigeria, however, where doubts exist as to the capability of a clearing entity to interpose itself between transaction counterparties,[118] the significance is grave, as it goes to the nature of property and contractual rights which exist in a clearing system and, more importantly, the ability to safeguard said rights as a matter of course and in the event of a market participant's insolvency. More is said on this important point in chapter 3.[119]

2.8.2. CCP as FMI and SRO

CCPs are FMIs and SROs. As an FMI, a CCP "[facilitates] the *clearing, settlement, and recording* of monetary and other financial transactions, such as payments, securities, and derivatives contracts (including derivatives contracts for commodities)."[120] As to its SRO-function, "[i]n its most complete form, self-regulation encompasses the authority to create, amend, implement and enforce rules of conduct with respect to the entities subject to the SRO's jurisdiction and to resolve disputes through arbitration or other means. Typically, this authority would be derived from a statutory delegation of power to a non-governmental entity."[121] According to IOSCO, the elements of effective self-regulation are: (a) industry specific knowledge, (b) industry motivation, (c) contractual relationships with stakeholders, (d) transparency and accountability, (e) flexible SRO compliance programmes and (f) coordination and information sharing.[122] SROs are defined under Nigerian law as "any registered securities exchange, capital trade point, an association of securities dealers, clearing house, capital market trade association or any other self-regulatory body approved as such, by the [SEC]".[123]

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[117] See Chamorro-Courtland (n 116) (*emphasis in original*).
[118] This is due largely to gaps in the law and extant regulatory frameworks; these issues are expanded upon more comprehensively in chapter 3.
[119] See chapter 3 at 3.4.
[120] CPSS-IOSCO Principles 5 (*emphasis added*).
[121] IOSCO, *Model for Effective Regulation* (2000) 3 <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD110.pdf>
[122] Ibid.
[123] Section 315 of the ISA 2007.

In playing the dual role of FMI and SRO, CCPs set out rules of the game which help them discharge their market functions and their clearing members are obliged to comply and abide by these rules. As will be discovered in chapter 3, whether the rules of a CCP enjoys statutory endorsement goes to the robustness of a regulatory framework (i.e., appurtenant infrastructure). Upon joining a CCP, potential clearing members would typically enter into membership agreements with the clearing entity, among other things, undertaking to abide by the rules of the CCP.[124] These rules would typically be normatively conjunctive—maintaining a clear and readily ascertainable connection—to the statutory or regulatory framework which guides the CCP itself as a regulated entity and will cover its operations as a risk management solution infrastructure, extending to default procedures, clearing and settlement, and collateral arrangements. In addition to executing an undertaking to comply with a CCP's rules, which would be a precondition to membership, a member would also be required to abide by said rules on an on-going basis. Notably, where a market participant decides not to become a clearing member,[125] it is still possible to access the services of a CCP as a client of a clearing member. It is even possible for clients to have clients of their own.

Membership rules set out by CCPs, which clearing members would have to abide by, are not typically dissimilar to those which exchanges will usually set out for their members, covering: (a) proper corporate form (b) minimum capital, (c) operational and financial requirements, (d) netting and (e) default management, margining, and risk waterfall. These are discussed briefly in the following sub-section.

2.8.2.1. Proper Corporate Form

CCP rules will typically set out the expectation that a clearing member would be some sort of regulated financial institution. For example, LCH Ltd notes that its membership is constituted of "some of the largest and most sophisticated banks and broker dealers operating in global derivatives markets".[126] Similarly, European Commodity Clearing (ECC), a clearing house for energy and commodity products in Europe, requires entities wishing to be registered as clearing members to be "licensed by the regulatory authorities in charge within their countries of incorporation. The license needs to comprise the permission to offer banking transactions or financial services which are required for participation in clearing".[127]

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[124] The House of Lords held in *Clarke v Earl of Dunraven* (*The Satanita*) [1897] AC 59 the rules of a club bind its members in contract. Indeed, it was held in *Shearson Lehman* [1989] 2 Lloyd's Rep 570 that the rules of the London Mercantile Exchange (LME) derivatives market should bind both members and non-members.

[125] This could be due to the financial or regulatory costs associated with membership.

[126] See "Become a Member at LCH Ltd", available at: <https://www.lch.com/membership/ltd-membership> accessed 26 November 2018.

[127] See "Prerequisites to Become a Clearing Member", available at: <http://www.ecc.de/ecc-en/access-to-ecc/clearing-members> accessed 26 November 2018.

2.8.2.2. Minimum Capital

There will also be rules setting out the requirement for clearing members to meet a minimum capital base. Using LCH Ltd as an example again: there, "[subject] to the absolute minimum requirement of £5mn sterling, Clearing Members who clear more than one exchange (categories B – D) or have LCH EnClear Services Clearing Member status and/or EquityClear Clearing Member Status (categories I – J), are required to meet a minimum Net Capital Requirement which is the sum of their specific requirements. For example, a Clearing Member acting as a General Clearing Member on the LCH Enclear Service (Category C - £2mn sterling) and as an EquityClear Individual Clearing Member (category I - £5mn sterling) has a minimum requirement of £7mn sterling. A Clearing Member acting as a General Clearing Member on LCH Enclear Service only (Category C - £2mn sterling) has a minimum requirement of £5mn sterling".[128]

2.8.2.3. Operational and Financial Requirements

Clearing members will generally have to abide by the CCP's operational and financial requirements and will have to put in place all the necessary credit and banking arrangements required to support contemplated clearing activities. So, for example, clearing members of ECC must contribute to a fund (general clearing members: EUR 30mn; direct clearing members: EUR 7.5mn) and they must show proof of the operation of an adequate technical access (back-office access) and proof of qualified personnel.[129]

2.8.2.4. Default Management, Margining, and Risk Waterfall

CCPs neuter disruptions by netting across multiple positions reducing the total positions that need to be replaced, an act which abridges price impact. Being the major reason why they exist, CCPs will have a comprehensive set of default procedures in their clearing rules. They also effect orderly replacement by auctioning defaulters' contractual obligations off. There are three principal stages in managing default at a clearing entity. Firstly, the CCP determines that a clearing member is in default under its rules and then declares a default. Information to predicate a declaration will usually be publicly available, for example, *via* insolvency filing or regulatory action against an entity. Secondly, the defaulting party's portfolio is managed either by being immediately sold/auctioned or liquidated. Thirdly, the defaulter's collateral is allocated to cover losses caused by the default.

The default procedures will set out the 'waterfall' of financial resources that a CCP will have at its disposal to cover any losses arising from the default of a clearing member. Once entered into, the

[128] Section 1.7.3, LCH Clearnet Limited, Clearing House Procedures.
[129] See "Prerequisites to Become a Clearing Member", available at: <http://www.ecc.de/ecc-en/access-to-ecc/clearing-members> accessed 26 November 2018.

value of financial contracts will fluctuate on a daily basis, meaning a counterparty can both lose and make money on a daily basis. Daily gains and losses are calculated by 'marking-to-market', a "process of revaluing positions on a continuous basis, at least once a day or intra-daily as close as possible to real-time. Its value is the difference between the closing price from the previous day and the current closing price. Generally, marks are either the most recent market-determined price for each contract or, at the contract's termination, the cash-market price of the underlying asset. Increases in settlement prices produce gains for long positions and losses for short positions."[130] The respective profits or losses can then be settled accordingly. Therefore, in theory, the most either the CCP or clearing member can lose is the loss occurring within one trading day.

To help reduce market participants' incentives for excessive risk-taking and to set aside capital resources to take care of default scenarios, a CCP will require sellers to post positive collateral, which is known as margin, a "performance deposit",[131] which is returned to the poster upon the settlement of a transaction. Should a counterparty default, the CCP can realise the collateral posted by way of margin to cover the defaulting party's obligation.

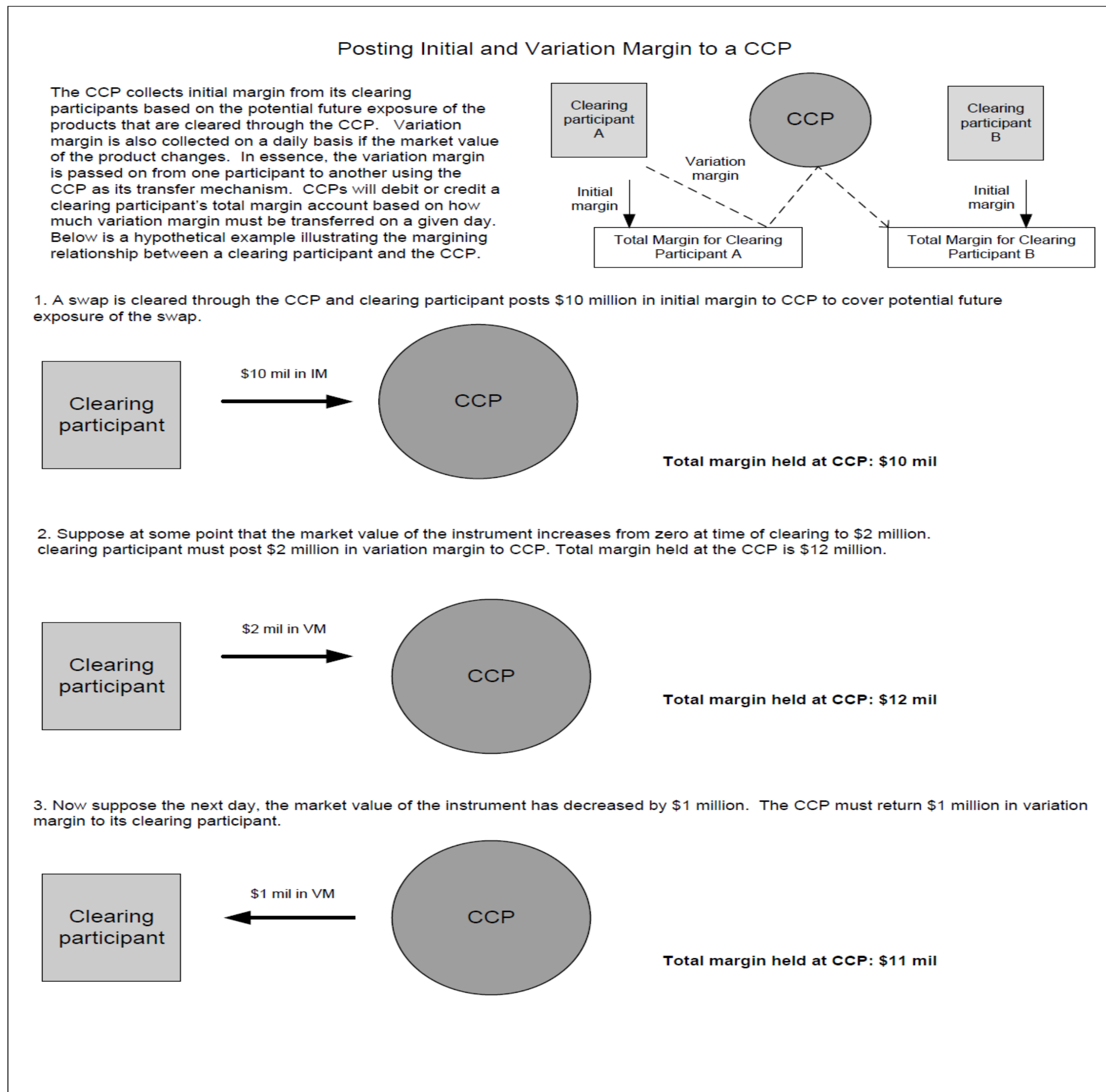
There are two types: variation margin and initial margin. *Initial margin* is posted by a market participant before entering into the derivative transaction with the objective of protecting the CCP from future losses on open contracts. *Variation margin* is posted to settle, on a daily basis, market participants' outstanding positions with the objective of adjusting the daily value of the underlying contract. It is posted as 'top up' payment into the participant's margin account. Should margin requirements exceed the collateral value, a margin call will be incited in real time to settle the difference. Margin calls will typically be met speedily (for example, in one hour) *via* direct debit.[132]

The usual risk measures which inform CCPs' margin processes include scenario-based approaches, which appraise the possible worst loss-case of the portfolio across a collection of scenarios and statistical risk measures. Some of these risk measures are VaR, ES, or relevant variants. Generally, initial margin is calculated based on the net positions of all open contracts *per* security held by the market participant. Computation is predicated on the historical VaR. For initial margin, the securities are allocated to different risk buckets, depending on a security's VaR. Opposing positions within a risk bracket are netted, computed as the worst-case loss at a certain confidence level, which

[130] Tina Hasenpusch, *Clearing Services for Global Markets* (Cambridge University Press 2009) 30.
[131] Andrew Chisholm, *Derivatives Demystified: A Step-by-Step Guide to Forwards, Futures, Swaps and Options* (2nd edn, The Wiley Finance Series 2010) 5.
[132] For the operational mechanics of how CCPs work, see "Clearing terms of SIX x-clear Ltd for SIX Swiss Exchange Ltd", available at: <https://www.theotcspace.com/sites/default/files/2013/04/clr-x-clear-general-clearing-terms-xcl-500.pdf> accessed 4 December 2018.

will usually range between 99% to 99.75%.[133] Variation margin is calculated on the basis of the mark-to-market valuation of the net positions of all open contracts *per* security held by the participant. Figure 2.7. which follows sets out how clearing participants post initial and variation margin.

Figure 2.7.: Illustration of mechanics of posting and treatment of margins



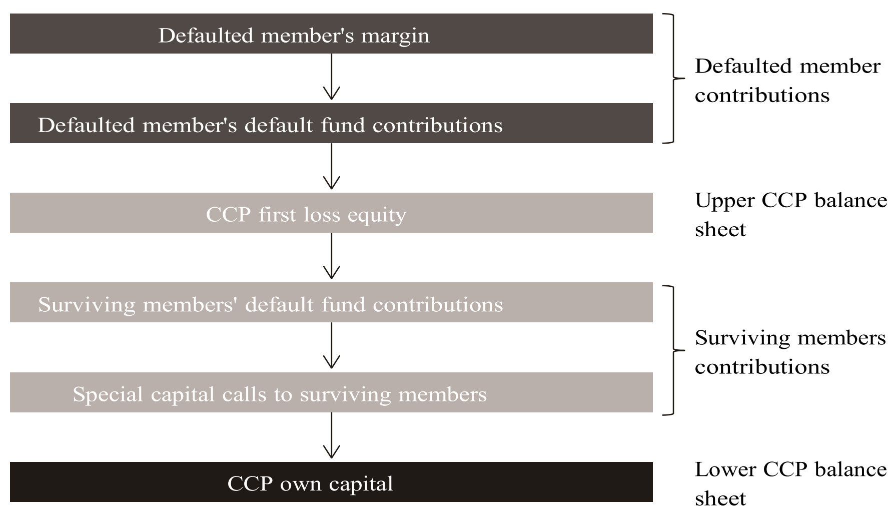
Source: Darrell Duffie, Ada Li, and Theo Lubke, 'Policy Perspectives on OTC Derivatives Market Infrastructure' [2010] Federal Reserve Bank of New York Staff Reports, no. 424.

As noted, CCPs rely on a waterfall of resources to absorb defaults. The first leg of the waterfall would be the defaulter's margin; the second leg would be the defaulter's contribution to the CCP default fund. As soon as the resources contributed by a defaulter are exhausted, a CCP can utilise other resources, usually its own equity; the next leg would then utilise default fund contributions of non-defaulting members, followed by capital calls to non-defaulting members and, then finally, the CCP's own capital. In some cases, a CCP may utilise the margins of non-defaulting clients of a

[133] McDonald (n 14) at 789.

defaulting member to satisfy the obligations of any defaulting clients.[134] The various legs can be arranged in any number of ways. Obviously, where the CCP's capital is the first leg which will be hit, it would be appropriately incentivised to discharge its SRO and infrastructure functions efficiently, controlling risk, monitoring its members, and choosing margin levels perspicaciously. Figure 2.8. which follows outlines an illustration of the cascade of losses in a CCP when a clearing member defaults.

Figure 2.8.: Illustration of the cascade of losses in a CCP when a clearing member defaults



Source: Ignacio Ruiz, *XVA Desks — A New Era for Risk Management: Understanding, Building and Managing Counterparty, Funding and Capital Risk* (Palgrave Macmillan UK 2015)

2.9. The Development, Structure, and Dynamics of the Nigerian Derivatives Market

Although there is an exchange-traded segment, the derivatives market in Nigeria is dominated by the OTC segment.[135] There is consensus that there is a need for more vibrant derivatives markets in Nigeria,[136] as it is accepted that this will further align the Nigerian financial markets with global markets. To that end, efforts at developing the markets (from a products and infrastructure perspective) are intense and gathering pace. The argument made in this dissertation, however, is

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[134] Christian Chamorro-Courtland, 'Collateral Damage: The Legal and Regulatory Protections for Customer Margin in the U.S. Derivatives Markets' [2016] 7(3) William & Mary Business Law Review 609-682.

[135] Elijah Udoh, 'Financial Derivatives' [2014] Central Bank of Nigeria Understanding Monetary Policy Series No 46 ("Financial derivatives such as FX options, Forwards (outright and non-deliverable), FX swaps and cross-currency interest rate swaps were introduced into the Nigerian financial market as part of post crisis reforms in 2011.") 16 <https://www.cbn.gov.ng/out/2016/mpd/understanding%20monetary%20policy%20series%20no%2046.pdf> accessed 5 January 2020.

[136] Feyisayo Popoola, 'Derivatives Will Enhance Capital Market Liquidity — SEC' *Punch* (20 June 2019) <https://punchng.com/derivativesll-enhance-capital-market-liquidity-%E2%80%95-sec/> accessed 6 January 2020.

that these efforts will only be successful if yet more extensive legal and regulatory reform is implemented to support the on-going efforts of market infrastructures and other market operators.[137]

2.9.1. Foreign Exchange Derivatives

In addition to the Nigerian derivatives market being largely an OTC market, from a products perspective, the market is skewed towards foreign exchange derivatives. This is because the country's economy is trade-focused and disproportionately dependent on imports for its supply of goods and services.[138] This places pressure on the demand for foreign exchange in a country dependent on a single commodity, crude oil, for its foreign currency receipts. [139]

In terms of general participation, the overall structure of the Nigerian foreign exchange derivatives market is as set out below in Figure 2.9.

Figure 2.9.: Structure of the Nigerian Exchange-Traded FX Derivatives Market

Types of Foreign Exchange Derivatives Market	Participant Category	Participants	Types of Derivatives Products
OTC foreign exchange derivatives market	Transaction counterparties	▪ Banks ▪ CBN ▪ Customers	▪ *Forwards* ▪ *Swaps* ▪ *Cross-currency interest rate swaps* ▪ *Options*
	Other counterparties	▪ FMDQ Securities Exchange	▪ *Reporting platform*
Exchange-traded derivatives market	Transaction counterparties	▪ Banks ▪ CBN ▪ Customers	▪ *FX Futures*
	Other counterparties	▪ FMDQ Securities Exchange ▪ FMDQ Clear	▪ *Market organiser, trading platform and supervisory Oversight* ▪ *Clearing House*

Source: Developed by researcher

The foreign currency demand pressure referenced above means that the local currency, the Naira, is an extremely volatile currency relative to major foreign currencies, especially the US Dollar. This is so notwithstanding persistent efforts by the CBN to moderate demand through its foreign

[137] The NGX Group and the FMDQ Group are two major infrastructure groups in Nigeria championing the development of exchange-traded derivatives markets.
[138] See generally Central Bank of Nigeria, *Modelling the External Sector of the Nigerian Economy* (2013) <https://www.cbn.gov.ng/out/2015/rsd/modeling%20the%20external%20sector%20of%20the%20nigerian%20economy.pdf> accessed 5 January 2020.
[139] Anthony Osae-Brown and Tope Alake, 'It's 2015 All Over Again for Nigeria as Pressure Builds on Naira' *Bloomberg* (20 August 2019) <https://www.bloomberg.com/news/articles/2019-08-20/it-s-2015-all-over-again-for-nigeria-as-pressure-builds-on-naira> accessed 5 January 2020.

exchange restriction list as well as persistent interventions in the foreign exchange market.[140] This remains a major source of transaction risk in the Nigerian financial markets and business arena for *all* participants requiring active management through the use of foreign exchange derivatives.

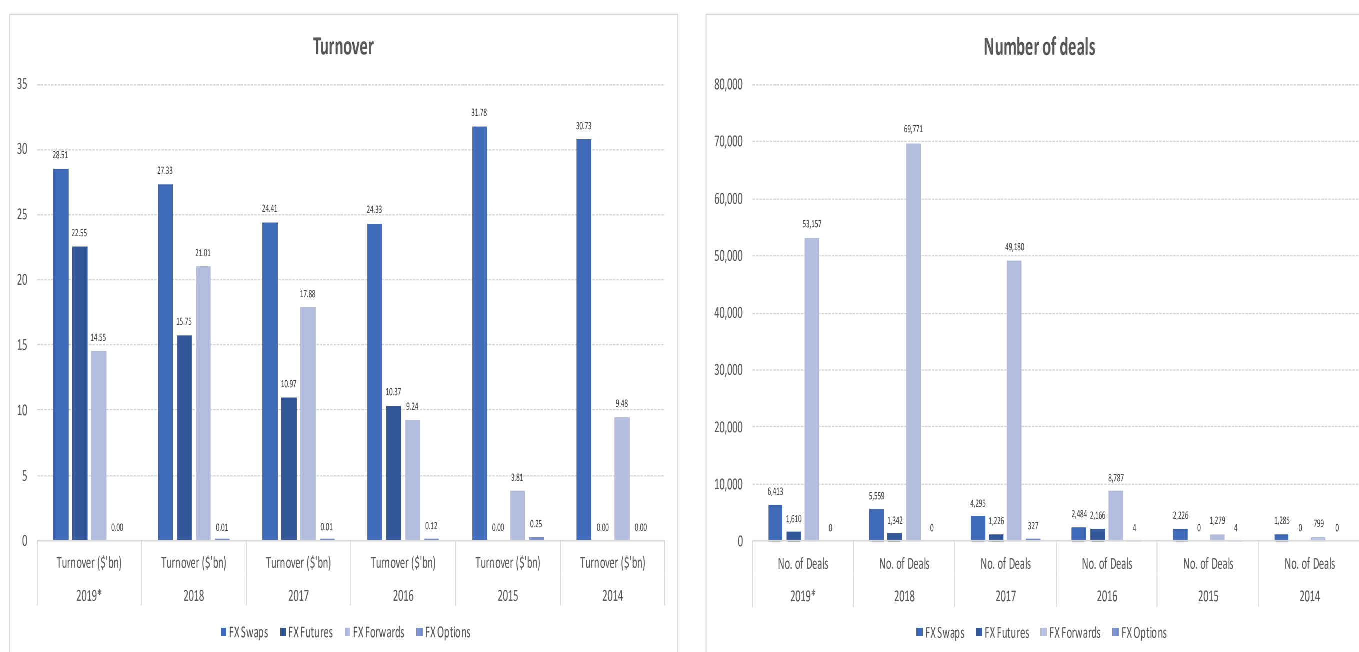
Table 2.1.: Tabular representation of turnover and volume of foreign exchange derivative transactions in the Nigerian financial markets from 2014 – 2019

Product	2019*		2018		2017		2016		2015		2014	
	Turnover ($bn)	No. of Deals	Turnover ($bn)	No. of Deals	Turnover ($bn)	No. of Deals	Turnover ($bn)	No. of Deals	Turnover ($bn)	No. of Deals	Turnover ($bn)	No. of Deals
FX Forwards	14.55	53,157	21.01	69,771	17.88	49,180	9.24	8,787	3.81	1,279	9.48	799
FX Options	0.00	0	0.01	0	0.01	327	0.12	4	0.25	4	0.00	0
FX Swaps	28.51	6,413	27.33	5,559	24.41	4,295	24.33	2,484	31.78	2,226	30.73	1,285
FX Futures	22.55	1,610	15.75	1,342	10.97	1,226	10.37	2,166	0.00	0	0.00	0
Total	65.61	61,180	64.10	76,671	53.27	55,028	44.07	13,441	35.84	3,508	40.21	2,083

* -- as of September 27, 2019

Source: obtained from Market Services Group, FMDQ Group, 2019

Figure 2.10.: Graphical representation of turnover and volume of foreign exchange derivative transactions in the Nigerian financial markets from 2014 – 2019



* -- as of September 27, 2019

Source: obtained from Market Services Group, FMDQ Group, 2019

[140] The CBN issued a circular dated June 23, 2015 which excludes importers of certain goods and services from accessing the foreign exchange markets for foreign currency to facilitate importation of said goods and services. See CBN, "Inclusion of Some Imported Goods and Services on the List of Items Not Valid for Foreign Exchange in the Nigerian Foreign Exchange Markets", available at: <https://www.cbn.gov.ng/out/2015/ted/ted.fem.fpc.gen.01.011.pdf>.

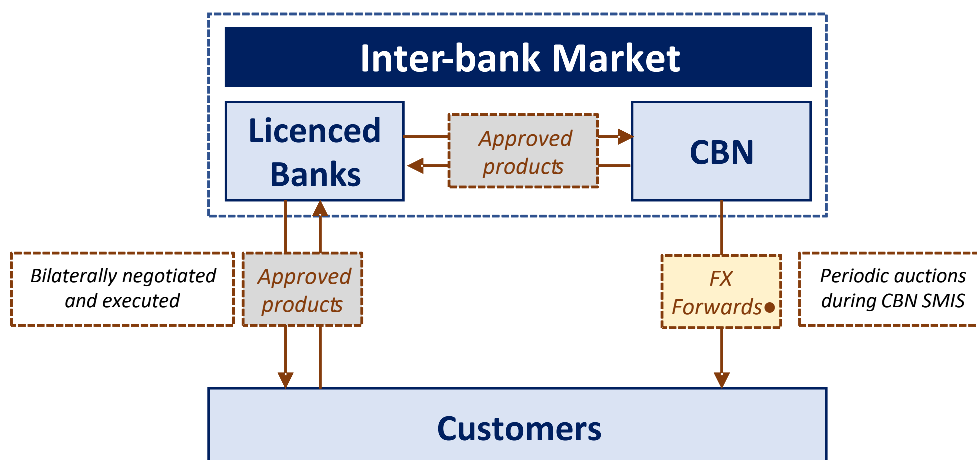
In terms of participants, the Nigerian (FX) derivatives market is dominated by deposit money banks licensed and regulated by the CBN.[141] Foreign exchange exposure for businesses typically arise from any of the following: (a) trade obligations, (b) foreign currency debts, and (c) foreign direct or portfolio investments.[142] The common feature is that market participants are often obligated to purchase foreign currency on a later date to settle obligations arising from any of the above-mentioned transactions.

As shown in Figure 2.9. above, the approved products which exist in the market are foreign exchange options, forwards (outright and non-deliverable), FX swaps, and cross-currency interest rate swaps. Currently, these derivatives are executed using the 2002 ISDA Master Agreement or some variation thereof and they are often done in compliance with the *Guidelines for FX Derivatives and Modalities for CBN FX Forwards 2011*. Transactions executed for forwards between bank customers are effected using executed mandate letters confirming the relevant transactions further to master agreements.

Although banks are required to report all foreign exchange derivatives transactions to the FMDQ Group, the off-balance sheet nature of these transactions make it difficult to track the actual volumes and value of OTC foreign exchange derivatives executed. However, based on reported transactions for 2018, the size of the OTC foreign exchange derivatives market stood at around $65.6 billion representing two times the market capitalisation and nineteen times the annual turnover of all publicly listed companies in Nigeria taken together.[143] Figure 2.11. which follows outlines the structure of the OTC foreign exchange derivatives market in Nigeria.

Figure 2.11: General structure of the OTC foreign exchange derivatives market in Nigeria

[141] See chapter 1 at 1.9.2.
[142] See generally data generated by National Bureau of Statistics available at: <http://nigerianstat.gov.ng/elibrary?queries[search]=Capital%20importation>.
[143] Data source: Market Services Group, FMDQ Group, details on file with researcher.



● *Transactions in these FX Forwards are 1way with the CBN selling deliverable forwards with maturities ranging between 30 days to 60 months to customers*

Source: Developed by researcher

2.9.2. The Odd Case of the 'OTC FX Futures'

There is also an organised foreign exchange derivatives market which is *close* in its organisation and product features to a fully active exchange-traded derivatives market. It is, however, properly considered, an 'exchange-listed' foreign exchange derivatives market, as opposed to an exchange-traded derivatives market due to product features in this market and the reality that the market itself manifests traits of an OTC foreign exchange derivatives market.

As shown in Figure 2.11. above, the only derivative product traded in this market is the Naira-settled OTC FX futures, which is actually a non-deliverable forward contract with risk management features of a standard futures contract. The product was introduced in 2016 through collaborative efforts between the CBN and the FMDQ Group to provide a framework for market participants to hedge their foreign exchange exposures, and, more importantly, help ameliorate foreign exchange demand in support of other monetary actions undertaken by the CBN during the period of extreme foreign exchange volatility witnessed in 2016.[144] As at 31 March 2020, the value of open contracts for the OTC FX futures stood at $14 billion.[145]

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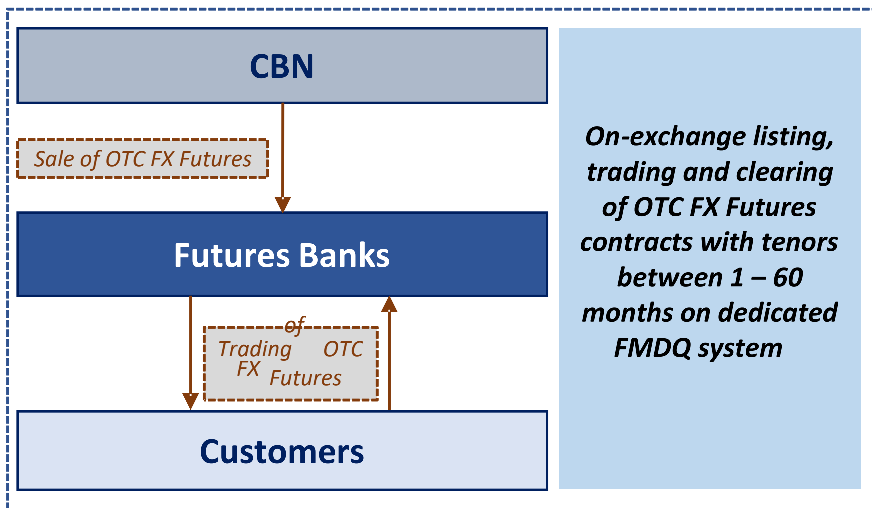
[144] FMDQ, CBN, FMDQ Launch Naira-settled OTC FX Futures Market (28 June 2016) <https://www.fmdqgroup.com/cbn-fmdq-launch-naira-settled-otc-fx-futures-market/> accessed 6 January 2020 ("The Central Bank of Nigeria made history in the Nigerian [foreign exchange] market as it became the pioneer seller of the Naira-settled OTC FX Futures contracts on [FMDQ] on Monday, June 27, 2016… The Naira-settled OTC FX Futures product, whilst of tremendous benefit to Nigerian corporates, is equally of immense importance and advantage to, among others, the CBN, the Nigerian FX market, and the nation's economy as a whole. The OTC FX Futures market will serve to, inter alia, minimise the disequilibrium in the Spot FX market and cause the rate to moderate; attract significant capital flows to the Nigerian fixed income and equity markets; and achieve exchange rate stability. There is no longer the need to front-load FX requirements, which puts immense pressure on and distorts the [spot] FX rate.")

[145] Data source: Market Services Group, FMDQ Group, details on file with researcher.

Some of the features of the OTC FX futures market that are similar to standard exchange-traded derivatives market include: (a) centralised listing and the existence of an order book for contracts, (b) on-system execution of trades, (c) margining and risk management of open positions in executed transactions by a clearing house (i.e., FMDQ Clear Limited), and (d) semi-standardised contract features.

Figure 2.12.: General structure of the Nigerian exchange-traded foreign exchange derivatives market



Source: Developed by researcher

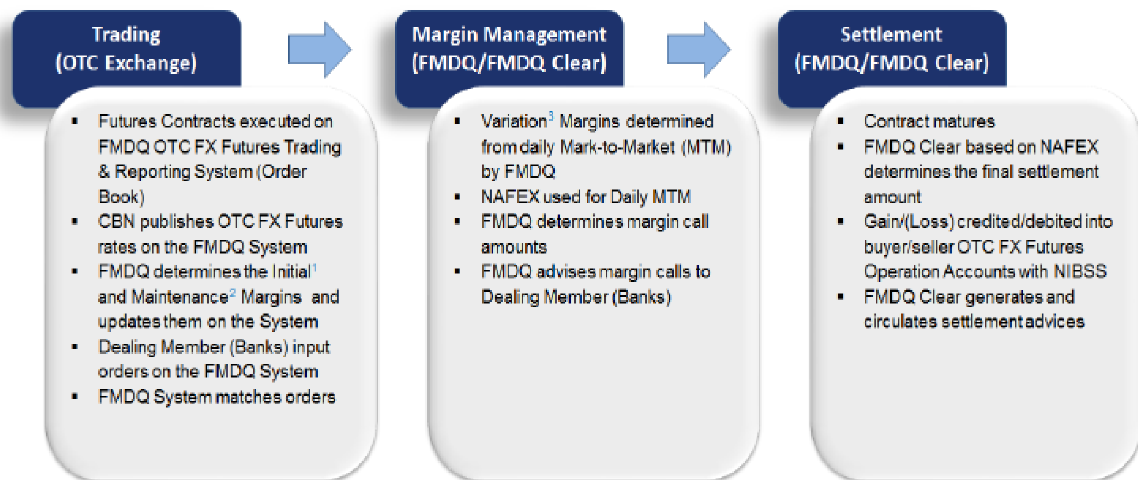
In practical terms, parties agree to an exchange rate for a predetermined date in the future, without the obligation to deliver the underlying US Dollar (notional amount) on the expiry date. On the expiry date, on the assumption that both parties would have transacted at the spot rate, the party which would have suffered a loss is then paid a settlement amount in Naira. This ensures that both parties enjoy the rate that had been hitherto guaranteed through the OTC FX futures. OTC FX futures are executed on the back of an OTC FX futures master agreement between the CBN and FMDQ, on the one hand, as well as another between each bank and FMDQ, on the other hand. Each bank then executes a master agreement with their customers mirroring that which exists between the CBN and the bank. FMDQ Securities Exchange Limited serves as the exchange in the OTC FX futures market, FMDQ Clear Limited clears OTC FX futures i.e., collects initial and variation margins and settles the party entitled to compensation on the expiry date.[146]

Trading of OTC FX futures contracts are executed on a proprietary system developed by the FMDQ Group known as the 'FMDQ Futures Trading & Reporting System (FFTRS)'. An important finding is that in the OTC FX futures market, the CBN is the only seller of the contracts, which indicates that the reserve bank is using the product as a tool to manage foreign currency demand. This

[146] Within the FMDQ Group, there is also a central securities depository, FMDQ Depository Limited; however, it does not play a role within the "OTC FX futures" market structure.

position is supported by the fact that the CBN notes that the "availability of the OTC FX Futures will improve the business planning practice of end-users and [foreign currency] sellers, as the future exchange rate is guaranteed through the OTC FX Futures" and that the product will "attract significant capital flows to the Nigerian fixed income and equity markets as returns can now be enhanced as [foreign exchange] exposures are hedged."[147]

Figure 2.13.: Structure of OTC FX Futures Market on FMDQ



Note:
***Tenor** – 1M, 2M, 3M, 6M, 9M & 12M (M – Month)*

1. *Initial Margin - Amount paid by the parties to cover the counterparty risk, based on the estimated volatility*
2. *Maintenance Margin – Minimum amount that must be maintained in a margin account*
3. *Variation Margin - Additional funds that must be deposited to balance up to the initial margin requirement*

Source: FMDQ Group, How the Naira-Settled OTC FX Futures Market will work on FMDQ OTC Securities Exchange (December 17, 2018) <https://www.fmdqgroup.com//wp-content/uploads/2018/12/How-the-Naira-Settled-OTC-FX-Futures-Market-will-work-on-FMDQ-Dec.-17-2018.pdf> accessed 11 January 2020

An important requirement under the *Guidelines for FX Derivatives and Modalities for CBN FX Forwards 2011* is that foreign exchange derivatives transactions entered into by banks "must be backed by trade (visible and invisible) transactions".[148] This requirement, from all indications, has been designed to prevent banks from taking speculative positions in the derivatives market and seeks to limit their incentives to hedging only. However, as already discussed in the present chapter, the difference between hedging and speculation can be difficult to determine. Therefore, this dissertation submits that the practical import of this provision is that it prevents an important set of market participants—banks—from being able to make market in the financial derivatives segment, thereby crucially limiting the growth of the markets. Banks should be able to sell these contracts just as the CBN. It is only when all participants take part in the market that advancement towards asset market completion can be achieved. Arrow and Debreu confirm that where markets are

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[147] CBN, How the Naira-Settled OTC FX Futures Market will Work <https://www.cbn.gov.ng/out/2016/ccd/fx%20futures%20prima%20june%202016.pdf>.
[148] See 4.0 of the *Guidelines for FX Derivatives and Modalities for CBN FX Forwards 2011* at page 4.

complete and competitive, the equilibrium of asset, commodity, and risk allocation will achieve Pareto-efficiency and, consequently, entrench social utility.

2.9.3. Non-Foreign Exchange Derivatives

While other risk factors—such as interest rate risk, commodities price risk, and securities price risk— underscore the need for derivatives to hedge risk generally, the use of non-foreign exchange derivatives is minimal in the Nigerian financial markets. Reasons for this are as follows: limited understanding of derivatives and their uses, gaps in the regulatory framework (which in turn has a correlative effect on participation in the derivatives markets), and limited depth in the markets of the 'underlyings'. Consequently, usage of non-foreign exchange derivatives by financial markets participants are either effected as related party transactions (such as, between a local corporate and its multinational parent company, where such a parent company has back-end access to more developed derivatives markets) or through private equity funds, hedge funds, and financial entities with minimal transaction reporting obligations to regulators or financial market infrastructures in Nigeria.

This market segment is largely unregulated from a product standpoint, with participants able to structure and negotiate derivatives contracts to meet their risk and investment needs. Regulation of this market segment is therefore indirect, flowing from the regulation and supervision of transaction counterparties through their principal regulators (i.e., banks through CBN, insurance companies through NAICOM, and pension fund administrators through PenCom).

Even though the SEC in theory is responsible for regulating derivatives, regulatory visibility of this segment is limited and without adequate regulatory oversight and mandatory reporting requirements, it is difficult to estimate the size of the non-foreign exchange derivatives space or even document any discernible market structure. It is clear though that the market is largely OTC, with transactions being executed between willing counterparties. Like the OTC FX futures, these non-foreign exchange derivatives contracts are executed using variants of the 2002 ISDA master agreement or bespoke agreements developed by brokers or transaction arrangers. Typical participants in this segment include corporate entities seeking alternative investment channels, local investment banks (typically as transaction arrangers), private equity and hedge funds, and international banks. The typical transactions and risks hedged by local participants, as well as preferred derivatives products in this market segment include: interest rate swaps to hedge interest on local and/or foreign debt, equity forwards and options to hedge equity prices of current or prospective equity investments, and forwards to hedge prices of or export commodities through

off-taker contracts. A typical transaction would involve a transaction arranger bringing together counterparties, structuring the relevant derivative transaction and earning a 'structuring fee'.

2.10. Benefits and Social Utility of Derivatives and Appurtenant Infrastructure

The uses and benefits of derivatives must be viewed through the sociological truism that "[people] hate losses".[149] This sets out an effective framing for dimensioning who makes use of derivatives and why they do so. It is important to note that references to "losses" does not only relate to the product users, it also applies to the regulators and indeed the sovereign as well, who are invariably saddled with the cost of cleaning up after financial crises. Analysing the benefits and uses of these instruments will thus be undertaken by assessing the products themselves (which speaks to private benefits) and the markets and appurtenant infrastructure (which speaks to social utility) separately.

2.10.1. The Advantages as it Relates the Products

There are two major advantages observable with these products.[150] As noted above, there are broadly three categories of product users, hedgers, speculators, and arbitrageurs. While all three might be driven by different inclinations towards risk, the common thread is that they seek to manage (and leverage) risk to achieve their ends. The *first* (and arguably, major) usefulness therefore is: risk management. Were currency swaps not available to hedge foreign exchange risk, a company could be constrained to borrow only in its own currency at a higher cost. Product users use derivatives either to hedge risk or attempt to eliminate it in totality or leverage it to make financial gain: a large corporate might enter into an interest rate swap to hedge risk on a bond issue, while an asset manager might invest in an equity index by purchasing a call option, or an investment house could exploit price discrepancies between the spot and futures markets for a specific asset or security. As noted by Firth:[151]

> "The reduction or elimination of risk may be an end in itself as the existence of a significant amount of uncontrolled risk within a company can harm investor confidence and make it difficult to raise funds, at least where the risk would, if it came to fruition, result in financial distress".

Investors are, in short, able to decouple, target, and leverage the risk profiles of their portfolios in a deliberate manner due to the existence of these products; also, derivatives can be used to create synthetic positions which do not exist in cash or underlying markets. Figure 2.9. below sets out examples as to how financial market actors use derivatives to mitigate risk.

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[149] Richard Thaler and Cass Sunstein, *Nudge: Improving Decisions About Health, Wealth and Happiness* (Yale University Press 2008) 120.
[150] While research reveals disparate subsidiary benefits, they can be classed into two broad headers: risk management and alternative investment channels.
[151] See Firth (n 81).

Figure 2.14.: Uses and benefits of derivatives

Users	Underlying Risks	Derivative Types
Commodity manufacturers	Commodity price	Commodity derivatives
Multinational companies	Funding cost of foreign debt issuance and investments	Cross-currency swaps/FX forwards
Life insurers	Asset-liability management	Interest rate swaps or swaptions
Corporate treasurers	Funding cost before debt issuance	Forward rate agreements
Construction firms	The cost of raw materials	Commodity derivatives
Exporters	Foreign exchange (FX) fluctuations	Cross-currency swaps/FX forwards
Bank or loan portfolio managers	Credit risk of bond or loan exposures	Credit default swaps
Equity investors	Equity prices	Equity derivatives
Governments	Interest rate risk on new bond issuance	Interest rate swaps

Source: ISDA, *Evolution of OTC Derivatives Markets Since the Financial Crisis* (January 2021)

In practice, derivatives dealers will often manage their portfolio risks as a whole. The risk factors in constituent transactions will be isolated, decomposed, and then decoupled, with offsetting transactions entered to offset the overall risk, leading to more effective portfolio management.

Secondly, transacting in derivatives may itself be employed as a mode of investment; though, this is often the preserve of speculators and arbitrageurs. Put differently, dealing in these instruments creates alternative investment channels (separate and different to the underlying assets) for investors to direct investment towards. Firth gives an example of an asset manager entering an equity linked swap having calculated that the share price will rise. [152] The advantage in taking such a position would be reduced transaction costs, as the asset manager would not be paying stamp duty or fees to intermediaries.[153]

2.10.2. The Advantages as it Relates to Appurtenant Infrastructure

First, the existence and global proliferation of derivatives mean that in capital and financial market value chains, they engender liquidity and access to capital, especially as it relates to banking because these financial institutions can lend at lower risk. So, like the effect securitisation historically had on mortgage lending,[154] entering into a CDS, for example, would limit a financial

[152] Ibid.

[153] The numerous mechanisms through which transacting in derivatives can be used to avoid regulatory imperatives (such as banking, securities, accounting, tax and other) is already when known.

[154] See Nadauld and Weisbach (n 52).

institution's risk as it is 'divested' to other parties, meaning in theory more cash on hand to lend to businesses.[155]

A *second* market-wide advantage which accrues to users of these instruments is: advancement towards asset market completion. Awrey describes asset markets as being complete when participants within said markets are capable of realising "all possible patterns of risk and returns across time and in respect of all potential future states of the world".[156] In incomplete markets, market participants would otherwise have to imbibe and internalise the entire cycle of risks connected with holding title to specific assets, without the ability to decompose, decouple, and then divest themselves of these risks to willing bearers.[157] This is a particularly important point because as Arrow notes, "the competitive allocation of risk-bearing is guaranteed to be viable only if the individuals have attitudes of risk-aversion";[158] Arrow and Debreu, to this end, confirm that where markets are complete and competitive, the equilibrium of asset, commodity, and risk allocation will achieve Pareto-efficiency[159] and, as a consequence, entrench social utility.[160]

Thirdly, on the management of risk under appurtenant infrastructure, it is crucial to highlight the advantage that CCPs, described as "unlikely heroes"[161] after the Lehman Brothers' default, bring to the table. As already pointed out above, these market infrastructures help manage counterparty credit risk in derivatives markets, which in turn functions as a firewall in the overall management of systemic risk.[162] As noted by the BIS,[163] Lehman Brothers had derivative portfolios in CCPs around the globe which were—with one exception[164]—auctioned, liquidated, or transferred within

[155] Frank Partnoy and David Skeel, 'The Promise and Perils of Credit Derivatives' [2007] 75 University of Cincinnati Law Review 1019-1051.
[156] See Awrey (n 43) 77.
[157] Adam Waldman, 'OTC Derivatives and Systemic Risk: Innovative Finance or Dance into the Abyss?' [1994] 43 American University Law Review 1023-1090.
[158] Kenneth Arrow, 'The Role of Securities in the Optimal Allocation of Risk Bearing' [1964] 31(2) The Review of Economic Studies 91-96.
[159] Pareto-efficiency refers to an economic state where resources are allocated in the most efficient manner. It does not connote equality or fairness; rather it is a circumstance where no economic changes can make one economic actor better off without making at least one other economic actor worse off. See in general Amin Amershi, 'A Complete Analysis of Full Pareto Efficiency in Financial Markets for Arbitrary Preferences' [1985] 40(4) The Journal of Finance 1235-1243.
[160] Kenneth Arrow and Gerard Debreu, 'Existence of an Equilibrium for a Competitive Economy' [1954] 22(3) Econometrica 265-290.
[161] See Norman (n 103) chapter 1.
[162] These processes have already been described above. However, see Darrell DuYe and Haoxiang Zhu, Does a Central Clearing Counterparty Reduce Counterparty Risk [2009] Stanford University Working Paper <https://web.stanford.edu/~duffie/DuffieZhuFeb18.pdf> accessed 16 December 2018.
[163] BIS, *Quarterly Review*: International Banking and Financial Market Developments <https://www.bis.org/publ/qtrpdf/r_qt1812.pdf> accessed 18 December 2018.
[164] This was HK Securities Clearing Corp (HKSCC) which made a loss to the CCP of around $20 million, including cost and expenses. See Norman (n 103) 348.

weeks of the default without depleting the collateral Lehman had provided.[165] CCPs also reduce operational and settlement risk due to, *inter alia*, their documentation and margining procedures. Flowing from these, post the GFC, it follows that the implementation of the 2009 Pittsburgh G20 summit commitments and the conclusions of the de Larosière high-level group in 2009 as it relates to CCPs ought to ensure and assure that global regulatory actors possess a comprehensive picture of financial market concentrations and exposures, given that when market-wide systemic problems arise, the sovereign is often saddled with the cost of rectifying issues, a reality with far-reaching social consequences.[166]

A *fourth* advantage is: improved price discovery. The existence of markets and the act of making markets leads to enhanced price discovery, a useful social benefit. As noted by De Jong and Rindi, "[c]ontinuous markets provide immediacy, enhance […] price discovery and allow for easy enforcement of priority rules."[167] In making market by seeking to exploit informational disconnect between the prevailing market price of assets or instruments and their intrinsic value, Awrey posits that "to the extent that [derivatives] facilitate the arbitrage of a broader range of assets (by unbundling risk) and ever smaller price deviations (by reducing transaction costs), they can be seen as improving the process of price discovery and, as a result, enhancing informational efficiency."[168]

A *fifth* advantage, as advanced by Acharya *et al*,[169] is that the existence of these markets leads to enhancing liquidity within the underlying markets by attracting additional market participants seeking to exploit derivatives as an alternative to transacting in the underlying assets and reducing transaction costs, which manifest in the underlying markets as a result of the existence of the correlated derivatives markets. Acharya *et al* opine that "spot markets with derivatives have more liquidity and thus lower transaction costs than markets without derivatives."[170]

2.11. Demerits and Social Costs of Derivatives and Appurtenant Infrastructure

Standing in contrast to the merits set out above are the demerits and social costs which flow with the use of these instruments and accompany the appurtenant infrastructure and markets which

[165] Jon Cunliffe, Deputy Governor for Financial Stability of the Bank of England, 'Central Clearing and Resolution – Learning Some of the Lessons of Lehman' (speech at the FIA International Derivatives Expo 2018, London, 5 June 2018) <https://www.bis.org/review/r180606c.pdf> accessed 18 December 2018.
[166] In the aftermath of the GFC, for example, bailing out AIG led to some $60 billion of public support.
[167] Frank De Jong and Barabra Rindi, *The Microstructure of Financial Markets* (Cambridge University Press 2012) 10.
[168] See Awrey (n 43) 80.
[169] Viral Acharya, Menachem Brenner, Robert Engle, Anthony Lynch and Matthew Richardson, "Derivatives: The Ultimate Financial Innovation" in Viral Acharya and Matthew Richardson, (eds), *Restoring Financial Stability: How to Repair a Failed System* (Wiley Finance 2009) 234.
[170] Ibid.

follow them such as market, counterparty credit, settlement, liquidity, and operational risks. These are expanded upon in the following sub-section.

2.11.1. The Disadvantages as it Relates the Products

Firstly, derivatives are inherently complex instruments. The GFC highlights the significant role played by these products in the failure of iconic financial institutions such as Bear Stearns, Lehman Brothers and AIG in 2008. This inherent complexity has been shown to beget both a lack of transparency and information asymmetry in the market structure for these products, especially the OTC segment, and how they are transacted.[171] These markets, to be clear, present for private networks of contractual relations, anchored on bounded and limited public information, constituting a "complex web of mutual dependence"[172] which makes it difficult to understand, assess, and regulate risk, a major issue in the derivatives market, especially, again, in the OTC segment. As such, it is no surprise that in looking back over the destruction in the wake of the GFC, a joint HM Treasury and FSA paper highlighted that "positions and exposures of firms in OTC derivatives markets were not sufficiently transparent to other market participants or to regulators."[173] This is why the reaction of global regulatory actors has been to (a) push for enhanced use of CCP clearing for OTC derivatives, (b) improved standardisation, (c) improved transparency and (d) achieving minimum standards for CCPs.

Secondly, derivatives induce speculation.[174] Some market participants make use of derivatives purely as tools for speculation, as noted above. It has been pointed out, to illustrate, that an "overall drawback of CDSs is that a substantial chunk, and even the bulk of them, are used for speculation or shorting, rather than coverage of risks."[175] The ability to exploit opportunities within derivatives markets allows product users engage in enormous speculative activity relative to their initial capital outlay, which increases the quantum and breadth of risk inherent in capital and financial markets. It is entirely reasonable to question the utility of this endeavour, viewed this way.

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[171] Awrey (n 43) dimensions the notions of complexity, lack of transparency, and asymmetries of information as it relates to these instruments, noting two important facts: one, managing a portfolio of derivatives instruments is a complex undertaking and, two, the dealers who structure these instruments will, in many circumstances, possess an informational advantage over their end-user clients.

[172] House of Lords European Union Committee - Tenth Report, 'The Future Regulation of Derivatives Markets: Is the EU on the Right Track?' (HL Paper 93, 31 March 2010) 19 <https://publications.parliament.uk/pa/ld200910/ldselect/ldeucom/93/9302.htm> accessed 26 December 2018.

[173] Financial Services Authority and HM Treasury, 'Reforming OTC Derivatives Markets: A UK Perspective' (December 2009) 5 <http://www.fsa.gov.uk/pubs/other/reform_otc_derivatives.pdf> accessed 26 December 2018.

[174] Brian Booth, 'Prudence or Paranoia: Considering Stricter Regulation of the International Over-the Counter Derivatives Market' [1995] 5 Duke Journal of Comparative & International Law 499-526.

[175] See Memorandum by Mr John Chapman, Credit Default Swaps—The Missing Debate, in House of Lords European Union Committee - Tenth Report.

2.11.2. The Disadvantages as it Relates to Appurtenant Infrastructure

Externalising the concept of risk discussed immediately above from individual market participants to the broader market and system in which the actors play helps generate an understanding of demerits when one refers to appurtenant infrastructure.[176] This externalisation results in what is known as: systemic risk. This concept—which has contagion at its core—is the means by which shocks propagate from one element or segment of the financial system to another;[177] the shocks being referenced are financial shocks, which are serious enough to inflict damage upon the real economy. There is an inherent traceable correlation between a market participant's speculative activity (i.e., counterparty risk), on the one hand, and the resultant notion of systemic risk, on the other hand. Counterparty risk, arising from speculative activity, which crystallises between two important financial market actors can quickly undermine confidence in a financial system. Stout explains:

> "Economic logic supports the common law's concern that rampant speculation using derivative contracts increases individual and systemic risk. Unlike the use of derivatives bets for hedging—which reduces risk, or at least reassigns risk to a party that can bear it more inexpensively—purely speculative trading increases risk. After all, when two people gamble, we end up with one person who has more money than before and one who has less money, instead of two people who each have some money."[178]

To describe it as concisely as possible, due to (a) information and incentive problems and (b) the sheer size of these derivatives markets, the social costs embedded in the complex web of contractual rights and obligations—and the positions held within these markets—come with far-reaching consequences should (i) any number of important market players default and (ii) the repercussions of such default(s) be externalised into the broader financial system. Making things worse, with clearing and reduced transaction costs, the riskier market participants would now find themselves in a position to increase their trading activity (i.e., taking on more risk), leading to moral hazard.

A *second* major demerit which must be highlighted at this point in this work—and remains relatively unexplored at the time of writing—is the increasing concentration of risk within CCPs themselves and how this itself could present systemic risk. As has been described already, CCPs effectively absorb and neuter counterparty risk as between market participants thus limiting the prospect of systemic risk leading to concentration of risk within these devices.[179] It was noted:

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[176] While, strictly speaking, the web of contractual rights and obligations referenced in this context is not infrastructure *stricto senso*, this concept cannot be viewed as a product or instrument. To appreciate the scale, it is best viewed as a whole; hence the analysis from the prism of an appurtenance.
[177] Miquel Dijkman, A Framework for Assessing Systemic Risk (2010) (World Bank Policy Research Working Paper 5282) 6.
[178] Lynn Stout, 'Derivatives and the Legal Origin of the 2008 Credit Crisis' [2011] 1 Harvard Business Law Review 1-38.
[179] This is so, even though there were not originally designed or promoted as macro-prudential institutions.

> "[I]ncreased reliance on clearinghouses to address problems in other parts of the system increases further the need to ensure the safety of clearinghouses themselves. As Mark Twain's character Pudd'nhead Wilson once opined, if you put all your eggs in one basket, you better watch that basket".[180]

Pirrong points to two major issues: margins and default scenarios.[181] With margins, he points out that the need to meet ever-increasing margin requirements could very well lead to "exaggerated, systemically destabilising price movements".[182] As for default scenarios, he highlights that as CCPs do not have limitless resources, severe defaults in the derivatives market could threaten the solvency of CCPs, with serious systemic consequences. Therefore, the centrality and interconnectedness of CCPs in financial markets make them systemically important.[183]

In short, these machinations are by no means infallible and have indeed fallen in the past: the French Caisse de Liquidation clearinghouse failed in 1974, the Kuala Lumpur CCP failed in 1983, and the Hong Kong Futures Exchange failed in 1987.[184] CCPs could become insolvent for any number of reasons ranging from operational risks to mandatory clearing to moral hazard[185] to adverse selection to unforeseen risks or even interconnectedness to other large market infrastructure institutions and even a liquidity crisis.[186] The point being that in concentrating risk associated with central clearing of derivative transactions, CCPs may themselves become such important entities whose failure could very well have systemic repercussions.[187] The importance of these issues, relative to the recent ascent of clearing entities in Nigeria, is tackled in chapter 3.

2.12. Conclusion

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[180] Ben Bernanke, Chairman of the Board of Governors of the Federal Reserve System, 'Clearinghouses, Financial Stability, and Financial Reform' (speech at the 2011 Financial Markets Conference, Stone Mountain, Georgia, 4 April 2011) <https://www.federalreserve.gov/newsevents/speech/bernanke20110404a.htm> accessed 26 December 2018.
[181] Craig Pirrong, The Economics of Central Clearing: Theory and Practice (2011) (ISDA Discussion Paper Series No. 1) 12 <https://www.isda.org/a/yiEDE/isdadiscussion-ccp-pirrong.pdf> accessed 26 December 2018.
[182] Ibid.
[183] Froukelien Wendt, Central Counterparties: Addressing their Too Important to Fail Nature (2015) *IMF Working Paper WP/15/21* 5 <https://www.imf.org/external/pubs/ft/wp/2015/wp1521.pdf>.
[184] Pirrong (n 186) at 37.
[185] Ibid at 13. ("Indeed, one of the benefits of clearing, the fact that it makes cleared instruments fungible by making all potential counterparties interchangeable, gives rise to moral hazard. Clearing tends to reduce the costs that riskier firms incur to trade relative to the costs incurred by lower risk firms, thereby allowing the riskier to expand their trading activity relative to the low risk.")
[186] Christian Chamorro-Courtland, 'The Trillion Dollar Question: Can a Central Bank Bailout a Central Counterparty Clearing House which is too Big to Fail?' [2012] 6(2) Brooklyn Journal of Corporate, Financial, and Commercial Law 433-485.
[187] Some, notably, argue that this apprehension is overstated. See, to this end, Adam Levitin, 'Prioritisation and Mutualisation: Clearinghouses and the Redundancy of the Bankruptcy Safe Harbours' [2015] 10 Brooklyn Journal of Corporate, Financial, and Commercial Law 130-154.

Derivatives (as financial products) and derivatives markets now occupy a very important position in the global financial system. Over the last thirty years, these products and markets have evolved in complexity and sophistication, growing from an "obscure financial backwater"[188] into a major component of what is now considered the modern construct of global finance. Just as the products and markets have evolved, the infrastructures, actors, and regulatory imperatives which support and underpin them—especially exchanges and clearing houses—have evolved too and gained significant importance. For participants and regulatory actors, respectively, the uses and concern(s) (as it relates to these products) are clear and they largely have to do with risk. Participants aim to use it to manage and leverage private risk, while regulatory actors are invariably concerned with public risk.

This chapter has laid out (from a global perspective) the technical blocks upon which the legal and regulatory explorations which come subsequently are constructed upon. It has considered and defined derivatives as financial products,[189] tracing the history of these instruments, shedding light on who trades them, how they trade them, and why, and situated all these within a post GFC context. It has also considered the blurring between exchange trading and OTC trading, a dynamic which is being propelled largely by innovation and technology. A global overview of the markets has also been considered, showing that IRDs dominate the derivatives market with the US and the UK (for now)[190] being the major locations where these instruments are traded. CCPs as financial market infrastructures were also examined in some detail, with particular focus placed on the distinction between a CCP and a clearing house. As is discussed extensively in chapter 3, the distinction is important to bear in mind when exploring Nigerian securities, derivatives, company law, and netting in an insolvency context. It further reflects on the state of play, providing insight into the relevant market segments, products traded in the country, and then reveals important data as to market size, among others. In particular, insight is provided into the major derivative product transacted in Nigeria, the OTC FX futures, examining in detail the relevant market structure as it relates to this product. Lastly, the benefits and demerits of derivatives, derivatives markets, and their appurtenant infrastructure were examined from a functional and social perspective and tested against the sociological disinclination of people towards losses.

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[188] Dan Awrey, 'Complexity, Innovation, and the Regulation of Modern Financial Markets' [2012] 2(2) Harvard Business Law Review 235-317.

[189] Securitisation vehicles (and whether these are derivatives) were also considered.

[190] The effect of Brexit on the preeminent position of the UK as a global derivatives market is at the time of writing yet unclear.

Chapter 3 — The Nigerian Derivatives Regulatory Framework

3.1. Introduction

This chapter builds upon the technical frame developed in chapter 2. As the Nigerian derivatives market and the regulatory framework have evolved separately with regulation only just catching up to the market,[1] this chapter outlines the substantive research findings as it relates to the derivatives regulatory framework, which exists in Nigeria. The chapter then explores the three sources within the country's derivatives regulatory framework i.e., the SEC, the CBN, and the markets infrastructure.

Thereafter, the substantive regulatory defects in the subject jurisdiction (which are a major output of this work)[2] are deconstructed and systemised into an analytical framework. The gaps identified in the present chapter are rationalised through two sub-analytical frameworks: (a) law and regulation and (b) appurtenant infrastructure. The first sub-analytical framework explores the legal and regulatory gaps which exist in the derivatives ecosystem and the recent reform which has been introduced into Nigerian law, setting out important findings as to its adequacy or otherwise. The second sub-analytical framework explores the regulatory fractures associated with clearing entities in Nigeria.

3.2. The Derivatives Regulatory Framework

Derivatives are contemplated and provided for within Nigerian law. However, the relevant provisions are set out in a patchwork of legislations and regulations issued by two separate financial services regulators, the SEC and the CBN. These two regulators are the principal sources for derivatives regulation in Nigeria; although, it is also crucial to note that the markets infrastructure/SRO segment also constitutes an important source.

3.2.1. The SEC

Section 13(b) of the ISA 2007 provides that one of the functions of the SEC is to "register and regulate securities exchanges, capital trade points, futures, options and *derivatives exchanges, commodity exchanges* and any other recognised investment exchanges" (*emphasis added*), with

[1] Iheanyi Nwachukwu, 'Nigeria's SEC Says Derivatives Trading One of its Top Priorities in 2020' *BusinessDay* (6 January 2020) <https://businessday.ng/markets/article/nigerias-sec-says-derivatives-trading-one-of-its-top-priorities-in-2020/> accessed 28 February 2020.

[2] It submitted that a comprehensive systemisation and understanding of the gaps and defects in the Nigerian derivatives' regulatory framework as done herein has not been hitherto attempted.

section 315 of the same law going on to define "securities" as "(a) debentures, stocks or bonds issued or proposed to be issued by a government; (b) debentures, stocks, shares, bonds or notes issued or proposed to be issued by a body corporate; (c) any right or option in respect of any such debentures, stocks, shares, bonds or notes; or (d) *commodities futures, contracts, options and other derivatives*, and the term securities in [the ISA 2007] includes those securities in the category of the securities listed in (a) - (d) above which may be transferred by means of any electronic mode approved by the Commission and which may be deposited, kept or stored with any licensed depository or custodian company as provided under [the ISA 2007] (*emphases added*)." Finally, section 315 of the ISA then goes on to define a "securities exchange" as "an exchange or approved trading facility such as a *commodity exchange*, metal exchange, petroleum exchange, *options, futures exchanges, over the counter market, and other derivatives exchanges*" (*emphases added*). Clearly, therefore, the principal securities law in the country contemplates the trading of derivatives.[3]

The SEC Rules 2013 further sets out comprehensive provisions in connection with the registration, operation, and management (among other things) of 'commodities and futures exchanges', with rule 256 of the SEC Rules 2013 then going on to define "commodity futures exchange" as "any exchange or association, whether incorporated or unincorporated, or persons who shall be engaged in the business of buying or selling any commodity/futures contracts or receiving the same for sale on consignment".

The next set of rules issued by the SEC on derivatives are perhaps the most important as they occupy a very crucial position among the raft of regulations which make up the Nigerian derivatives' regulatory framework. The *SEC Derivatives and CCP Rules* were issued by the SEC on 23 December 2019. These rules are divided into two broad sections. The first part covers the regulation of derivatives (as products), derivatives trading and, as to be expected, sets out extensive provisions *inter alia* on registration requirements for derivatives contracts with the regulator, registration requirements for derivatives clearing members, exchange rules, clearing and settlement, participants, surveillance, position limits, leverage, transaction fees, risk management, sanctions, and reporting requirements. The rules apply to both exchange-traded and OTC derivatives (where specifically mentioned in the rules).[4]

The second part sets out elaborate rules *inter alia* on the registration requirements of CCPs, functions of these entities, governance, CCP rules, a framework for outsourcing of CCP functions,

[3] This being so, one principal task of this research (and, more relevantly, the present chapter) is to analyse the robustness or otherwise of the extant regulatory framework. The rest of the work does this.
[4] Rule 2, part a, of the *SEC Derivatives and CCP Rules*.

margin requirements, prohibited activities, waterfall and default management procedures, and provisions on risk management and collateral management. It is crucial to make a point on CCPs in Nigeria: since the ISA 2007 neither defines a "central counterparty", nor sets out the specific functions that attach to a CCP, questions arise as to whether the *SEC Derivatives and CCP Rules* (on CCPs) are legally permissible and not inconsistent with the peremptory provisions of the ISA 2007. The view in this work is that even if they are not, it is entirely conceivable for significant portions of this regulation to be *ultra vires*.[5] More is said on this in 3.3. below.

3.2.2. The CBN

In the broader financial services space, the CBN, which is the principal regulator of deposit money banks,[6] has also issued important regulations which regulate derivatives. The CBN has conveyed its approval of specific derivative products, mostly foreign exchange-related, which financial institutions—referred to as "Authorised Dealers"[7]—within its regulatory purview can engage in.[8] As Nigeria's economy is largely dependent on crude oil, which constitutes a major source of the country's foreign exchange earnings and revenue, the existence of foreign exchange derivatives in the country's financial system is perfectly understandable and is indeed crucial to the reserve bank's ability to manage foreign currency demand.[9] CBN's approving language is set out in the *Guidelines for FX Derivatives and Modalities for CBN FX Forwards 2011* and provides:

> "The approved hedging products are FX options, forwards (outright and non-deliverable), FX swaps and cross-currency interest rate swaps. Authorised Dealers are now allowed to offer European-styled FX call and put option contracts to their customers and in the inter-bank market. All hedge transactions with the customers must be backed by trade (visible and invisible) transactions. The CBN shall grant approvals for Authorised Dealers that qualify to engage in options."

Further, memorandum 5(1) of the CBN *Foreign Exchange Manual 2018* ("**CBN FX Manual**") empowers Authorised Dealers "with the ability to "deal in spot, forward, futures, swap in foreign exchange at market rates (a) among themselves, (b) with the CBN; and (c) any other party the CBN may prescribe from time to time." While the definitions and descriptions of these derivative

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[5] See Joanne Braithwaite, 'Thirty Years of *Ultra Vires*: Local Authorities, National Courts and the Global Derivatives Markets' [2018] 71(1) Current Legal Problems 369–402 and Edward Warren, 'Executory *Ultra Vires* Transactions' [1911] 24(7) Harvard Law Review 534 – 547.

[6] See generally *BOFIA 2020.*

[7] The FEMM Act 1995 defines an "Authorised Dealer" as:

> "any bank licensed under the Banks and Other Financial Institutions Act, and such other specialise bank and issued with licence to deal in foreign exchange."

[8] Note that under section 5(2) of the FEMM Act 1995 only "Authorised Dealers" and "Authorised Buyers" are empowered to "operate in the [Autonomous Foreign Exchange Market] subject to such terms and conditions as the [CBN] may specify in the letter of appointment."

[9] Other derivative products are only just being introduced in the country.

products as laid out in the CBN FX Manual comport with those described in chapter 2 above, it is important to outline specific provisions which have been so prescribed by the regulator as being relevant in the local market. For forwards, memorandum 5(b)(ii) of the CBN FX Manual provides that for a forward contract to be so recognised in the bank's foreign currency position, the following must be in place:

> "(a) A master forex agreement duly executed by the counterparties … between the counterparties to the forex [transaction];
> (b) A forward contract;
> (c) A deal slip;
> (d) The deal must be captured in the bank's blotter/ledger;
> (e) A confirmation of the forward deal must be sent to the counterparty; and
> (f) The transaction must be reported to the CBN"

The foregoing stipulation is relevant for swaps as well.[10] It is provided that "in all cases of swaps by Authorised Dealers, such transactions are restricted to a tenor of [three] years. However, for eligible transactions with longer tenor, the approval of [the] Director, Trade and Exchange Department, Central Bank of Nigeria, [must] be obtained".[11] The CBN FX Manual does provide, though, that swaps can be extended, where necessary, provided they do not exceed a maximum tenor of five years.[12] In contrast to content on forwards and swaps, the CBN FX Manual sets out modest provisions on futures contracts, only defining them as "legal agreements, generally made on the trading floor of a futures exchange, to buy or sell a particular commodity or financial instrument at a predetermined price at a specific time in the future".[13]

In addition to the provisions set out in the CBN FX Manual, the CBN has also issued the *Revised Guidelines for the Operation of the Nigerian Inter-Bank Foreign Exchange Market 2016*, which outlines guidelines on the inter-bank foreign exchange market, hedging products (i.e., derivatives), CBN intervention in foreign exchange market, and relevant execution and reporting standards. This CBN circular introduces—in collaboration with FMDQ—into the Nigerian financial markets an idiosyncratic financial product referred to as the 'Naira-settled Non-deliverable OTC FX Futures' (i.e., the OTC FX futures described above). Section 2.2. of the guidelines provide:

> " 2.2 Hedging Products
> 2.2.1 To further deepen the FX market, in addition to the already approved hedging products referenced in the CBN "*Guidelines for FX Derivatives and Modalities for CBN FX Forwards*", Authorised Dealers are now permitted to offer Naira-settled non-deliverable over-the-counter (OTC) FX Futures.
> 2.2.2 OTC FX Futures' transactions shall be non-standardised with fixed tenors and bespoke maturity dates.

[10] Memorandum 5(d)(iii) of the CBN FX Manual.
[11] Memorandum 5(d)(iv) of the CBN FX Manual.
[12] Memorandum 5(d)(iv) of the CBN FX Manual.
[13] Memorandum 5(c) of the CBN FX Manual.

2.2.3 OTC FX Futures sold by Authorised Dealers to end users must be backed by trade transactions (visible and invisible) or evidenced investments.
2.2.4 FMDQ will provide the appropriate benchmarks for the valuation and settlement of the OTC FX Futures and other FX derivatives.
2.2.5 FX OTC Futures and Forwards will count as part of the FX positions of Authorised Dealers.
2.2.6 To promote market liquidity, Authorised Dealers may apply FX Spot transactions to hedge Outright Forwards, OTC FX Futures and FX Options etc.
2.2.7 Settlement amounts on OTC FX Futures may be externalised for Foreign Portfolio Investors (FPIs) with Certificates of Capital Importation. Such settlement amounts shall be evidenced by an FMDQ OTC FX Futures Settlement Advice.
2.2.8 Furthermore, FMDQ will be developing detailed registration and operational regulation on FX Options and will drive, with the market, the development of
other risk management products and attendant guidelines."

In addition to the autonomous/inter-bank market which the CBN can intervene in directly, the *Revised Guidelines for the Operation of the Nigerian Inter-Bank Foreign Exchange Market 2016* reserves the right of the CBN to intervene through 'secondary market intervention mechanisms'.[14] Also, the guidelines introduce foreign exchange primary dealers (FXPDs), which are registered Authorised Dealers designated to deal with the CBN on large trade sizes on a two-way quote basis, among other things. [15]

3.2.3. FMIs/SROs

While several market infrastructures do exist in the country as noted above, only two—FMDQ and NGX—are at the forefront of the derivatives market, as market infrastructures and SROs. On 19 August 2019, the SEC approved the *Rulebook of the Nigerian Stock Exchange Derivatives Market*.[16] This rulebook sets out provisions on *inter alia* membership, formation of transactions and trades, trading rules, default rules, listing of derivatives, compliance, and enforcement. The derivatives market on the NSE has yet to take off and is still in its developmental stages. The NGX Group plans to "launch with equity index futures and then grow the list from there".[17] The FMDQ Group, however, does have a more buoyant derivatives market. The flagship product is the OTC

[14] See generally BIS, Foreign Exchange Market Intervention in Emerging Markets: Motives, Techniques and Implications (May 2005) <https://www.bis.org/publ/bppdf/bispap24.pdf> accessed 8 October 2019.
[15] Under the Foreign Exchange Primary Dealers (FXPDs) system systems, interested Authorised Dealers are empowered with the ability to transact foreign exchange products directly with the CBN. The *Guidelines for Primary Dealership in Foreign Exchange Products 2016*, which was issued by the CBN, sets out the requirements, responsibilities, and minimum standards for FXPDs. FXPD are required to continuously meet the standards set out in the guidelines and such other regulations as may be prescribed by the CBN from time to time. The guidelines are available at: https://www.cbn.gov.ng/out/2016/ccd/final%20guidelines%20for%20fx%20primary%20dealers%20fxpd15th%20june%2020161%2035pm.pdf
[16] Feyisayo Popoola, 'SEC Approves NSE Rulebook on Derivatives Market' *Punch* (23 August 2019) <https://punchng.com/sec-approves-nse-rulebook-on-derivatives-market/> accessed 8 October 2019.
[17] Mahmoud Habboush and Emele Onu, 'Nigerian Bourse Plans to Start Derivatives Trading Next Year' *Bloomberg* 20 November 2019 <https://www.bloomberg.com/news/articles/2019-11-20/nigerian-bourse-plans-to-start-derivatives-trading-next-year> accessed 4 March 2020.

FX futures which has already been discussed in detail above. The market is dominated by foreign exchange derivatives as explained above; although, there are plans to expand its product offerings.[18]

As exchanges and SROs, these infrastructures issue rules to their members which they must abide by to participate in the markets. FMDQ, for example, has issued several rules which regulate its derivatives markets, some of which include the *OTC FX Futures Market Operational Standards*[19] and the *OTC FX Futures Market Infractions & Penalties Guide*.[20]

3.3. Law and Regulation: Analysis

We now turn to the critical analysis of the legal scheme in the country. For a (derivatives) regulatory framework to be optimally structured, the array of rules and regulations underpinning the market, how they interact together, and the clarity with which they are crafted are important.[21] The rules to reduce financial market risks (such as is done with clearing entities to address counterparty and systemic risk), and robust risk management requirements (such as is achieved with netting, margining, and the exertion of SRO powers by an infrastructure over members) and generally supplying financial stability as a public good must be woven together with purpose to achieve liquid, deep, and transparent (derivatives) markets. In the following sub-section, this study examines extant Nigerian law (post derivatives reform) to this end.

3.3.1. Definitional Foundations

The first issue which the present research finds is that the principal legislation regulating derivatives in Nigeria, the ISA 2007, defines a 'derivative' as being a 'security'.[22] *Why might this be important*? The conflation of different concepts (in this case, 'derivative' and 'security'), even though they might both be financial instruments, does have an implication on the robustness of the regulatory framework and perimeter of accompanying legal obligations that can be constructed based on how the law defines them. The traditional understanding of 'securities' means that they are "agreements to exchange something of value in return for something of value. A simple example of such an exchange is a loan; a lender provides the borrower an initial sum of money and in return the

[18] Helen Oji, 'FMDQ Targets Derivative Products in Q1 2020, Plans Equity Trading' *The Guardian* (20 August 2019) <https://guardian.ng/business-services/business/fmdq-targets-derivative-products-in-q1-2020-plans-equity-trading/> accessed 4 March 2020.

[19] Available at: <https://www.fmdqgroup.com/wp-content/uploads/2018/08/OTC-FX-Futures-Market-Operational-Standards-August-16-2018.pdf>.

[20] Available at: <https://www.fmdqgroup.com//wp-content/uploads/2018/08/FMDQ-OTC-FX-Futures-Market-Infractions-Penalties-Guide-August-15-2018.pdf>.

[21] See chapter 1 at 1.2.

[22] Section 315 of the ISA 2007 ("securities mean … commodities futures, contracts, options and other derivatives …").

borrower pays the lender portions of the principal and interest over time".[23] So, at its most elemental level, an equity-based security would be a share (or stock), while a debt-based security would be a bond (or a note).[24] In sharp contrast, recall that it had previously been pointed out that a derivative is a contract or financial instrument whose value is derived from the value of an underlying asset at a future date,[25] meaning that, properly understood, a 'derivative' and a 'security' are two different things,[26] even though derivatives can be based on securities. We are cautioned that:

> "…the fundamental hybridity of derivative contracts yields a number of important policy insights. First, the braiding of contract, property, decision-making rights, and relational mechanisms makes derivatives look far more like commercial loans than publicly traded shares, bonds, options, or futures. The regulatory treatment of derivatives as "securities" under the Dodd-Frank Act—and the resulting emphasis on market transparency—is thus somewhat misguided and serves to distract regulatory attention from the significant prudential risks posed by the widespread use of derivatives ".[27]

Crucially, it has been further highlighted that "[s]ecurities laws are constructed upon the special characteristic of 'securities', which is not shared by most derivatives."[28] Therefore, "[c]aution is required when applying rules developed in securities regulation to derivative instruments."[29] In relation to OTC derivatives, we are further cautioned:[30]

> "Classifying OTC derivative products, including swap agreements, as securities and commodities is inappropriate given that the securities and commodities laws were devised to address policy concerns that are not present in the OTC derivatives market. The securities laws were primarily designed to protect retail investors from inadequate disclosure and fraudulent sales practices by broker-dealers. OTC derivatives transactions, including swap transactions, almost always involve institutional customers who typically are not in need of the comprehensive disclosure laws […]. Moreover, OTC derivatives transactions have been viewed as principal-to-principal transactions between two counterparties, unlike securities transactions that often involve an advisory relationship between a broker-dealer and its retail customer."[31]

Having therefore described a 'derivative' as being a 'security' in Nigeria, there are attendant regulatory implications and questions as to the applicability, or otherwise, of certain securities-

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[23] Alan Rechtschaffen, *Capital Markets, Derivatives and the Law: Evolution After Crisis* (Oxford University Press 2014) 49.

[24] From a jurisprudential perspective, differences even exist between debt-based and equity-based financial instruments. See *Slappey Drive Industrial Park v United States* 561 F.2d 572, 581 (5th Circuit 1977).

[25] See chapter 2 at 2.4.

[26] Recall the point that was made in chapter 2 on the distinction between a derivative and a security. Although also note that innovation has created links between the notion of a derivative and a security (for example, hybrid instruments which are regarded as securities). See Rechtschaffen at n 43 at chapter 12 and chapter 13.

[27] Dan Awrey, 'Split Derivatives: Inside the World's Most Misunderstood Contract' [2019] 36(2) Yale Journal on Regulation 495-574.

[28] Chao-hung Chen, 'Trading Risk: The Contractual Nature of Derivative Transactions and Certain Regulatory Issues' (PhD thesis, University College London 2008) 3.

[29] Ibid.

[30] The differences between OTC derivatives and ETDs do not detract from the fractures which accompany definitional conflation.

[31] Willa Gibson, 'Are Swap Agreements Securities or Futures: The Inadequacies of Applying the Traditional Regulatory Approach to OTC Derivatives Transactions' [1999] 24(2) Journal of Corporation Law 379-416.

related doctrines which impact on the soundness of the legal and regulatory framework as it applies to derivatives. Such definitional inelegance will engender legal uncertainty not only because the foundation upon which the legal and regulatory perimeter is constructed will end up being unartful, but it will have an implication as to which financial services regulator may appropriately exercise regulatory purview and the approach to be adopted.[32]

By way of further illustration, it is unclear whether the securities registration requirements contained in the ISA 2007 which apply to "securities" offered for sale on a securities exchange registered by the SEC will apply to "derivatives" too since they are "securities", as defined in the ISA 2007.[33] Realistically, it is inconceivable that this can be the intention of regulatory actors. Part IX of the ISA 2007 sets out extensive provisions on public offer and sale of securities to the public which, if market participants in the derivatives segment are to comply with, would present unduly burdensome and disproportionately onerous regulatory obligations thereby disincentivising participation in that market. These obligations are aimed at protecting retail investors in the capital markets and advance no impactful regulatory objectives in the wholesale space. In other words, this could serve to disincentivise participation in the derivatives market (at least the exchange-traded segment). Still, those are the provisions enshrined in Nigerian law at present. What this demonstrates is that the definitional premise upon which the derivatives regulatory perimeter is built is weak.[34]

3.3.2. Institutional Structure of Derivatives Regulation

In terms of institutional structure, as noted in chapter 1, the Nigerian financial system is sectoral and functional. It is made up of a web[35] of financial sector regulators, institutions, markets, participants, and financial products to facilitate the flow and allocation of funds weaved together over time by law, custom, and practice. The country adopts a combination of an institutional and functional regulatory approach, with several regulators exerting purview over a diverse collection of financial market participants.

[32] In the US, for example, the regulatory approach, provisions, and even regulators deployed to superintend securities market is entirely different to that deployed to the derivatives market.
[33] The *SEC Derivatives and CCP Rules* are silent on this point.
[34] As will be seen in chapter 5, in sharp contrast, the two comparator jurisdictions, the UK and South Africa, take a distinctly different approach to Nigeria in the definition of derivatives.
[35] Robert Merton and Zvi Bodie, "A Conceptual Framework for Analyzing the Financial Environment", in Dwight Crane, Kenneth Froot, Scott Mason, Andre Perold, Robert Merton, Zvi Bodie, Erik Sirri, and Peter Tufano (eds) The Global Financial System: A Functional Perspective (Cambridge, MA: Harvard Business School Press 1995) 3.

As far as derivatives is concerned, while the SEC exerts regulatory power over exchanges and derivatives (in general, being that they are defined as 'securities'), the CBN exerts regulatory oversight over the foreign exchange market and by extension FX derivatives. FX derivatives fall under the purview of the CBN because the relevant 'underlying' exist within the "autonomous foreign exchange market", which the CBN is tasked with regulating under the FEMM Act 1995.[36] This functional bifurcation, raises pressing issues of concern, and this study finds that regulatory actors in Nigeria are currently oblivious to these matters.

The first issue which comes to the fore is that of regulatory overlap and conflict. The demerits of such a circumstance have long been clear in financial regulation.[37] Not only do such situations provide fertile ground for costly turf wars between regulatory actors, but they also create uncertain, expensive, and complex regulatory frameworks, as is discussed in chapter 5. Unfortunately, in Nigeria, the SEC and the CBN have a persistent and well-documented history of working at cross-purposes, a situation which is untenable for participants in the country's derivatives markets.[38]

Second, as already explained above, applying the underpinning regulatory objectives which one finds with retail market[39] regulators (such as the SEC) to products, participants, and infrastructures in the wholesale/institutional end of the regulatory spectrum—which is the space derivatives market participants operate in—will invariably lead to less robust markets as relevant participants will simply decline to make market thus leading to reduced liquidity.

Third, functional regulatory systems tend to engender haphazardness, overlap, and regulatory conflict, all of which, taken together, present the perfect premise for financial crises, as was observed with the subprime crisis in the US.[40] Driven by different institutional objectives, among other things, financial market regulators do not often act in a coordinated fashion and typically operate in silos.[41] This dissertation finds this to be the case in Nigeria too. For example, the OTC

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[36] Section 2 of FEMM Act 1995.

[37] Charles Goodhart, Philipp Hartmann, and David Llewellyn, *Financial Regulation: Why, How and Where Now?* (Routledge 1998) 144.

[38] Take the recent regulation of cryptocurrencies for example. The SEC had issued a statement to the markets dated 14 September 2020 to the effect that unless otherwise demonstrated, cryptocurrencies were be treated as securities, stipulating that anyone who wished to issue them was to register with the SEC. This had the effect of outlining a preliminary regulatory framework for digital assets. In direct conflict with this, the CBN subsequently issued a letter to banks and other financial institutions within its regulatory purview dated 5 February 2021, directing that they close bank accounts belonging to persons and/or entities transacting in cryptocurrency or operating cryptocurrency exchanges.

[39] Particularly equity securities markets.

[40] See Jerry Markham, 'Merging the SEC and CFTC—A Clash of Cultures' [2009] 79 University of Cincinnati Law Review 537-611. With reference to the US, this work explores this more fulsomely in chapter 5.

[41] Randall Guynn, The Financial Panic of 2008 and Financial Regulatory Reform (2010) Harvard Law School Forum on Corporate Governance <https://corpgov.law.harvard.edu/2010/11/20/the-financial-panic-of-2008-and-financial-regulatory-reform/> accessed 17 January 2020 ("Largely following the historical jurisdictional

FX futures contract, which was designed by the CBN and the FMDQ Group appears to have been introduced with limited recourse to the SEC even though the exchange where the products were admitted is regulated by the SEC. The defects of the institutional structure of the financial regulatory (and derivatives) framework are further explored, from a comparative perspective, in chapter 5.

Fourth, this dissertation submits that while the *SEC Derivatives and CCP Rules* might be a good step in advancing the derivatives regulatory framework in Nigeria in general, the rules are wholly inadequate as they were not designed with sufficient synchrony with the CBN, if at all, underscoring concerns about it.[42] On this, this work finds, more particularly, as follows:

- Firstly, there is neither a delineation between deposit money banks and securities dealing firms in the *SEC Derivatives and CCP Rules*, two distinct types of intermediaries, nor is there any articulation as to how they are expected to participate in the derivatives market. Because of the former's ability to take deposits (and their access to vastly more financial resources), questions of competitive fairness[43] and questions as to the robustness of securities dealing firms' internal risk management frameworks arise. Given their more modest capital requirements, securities dealing firms are constrained from investing in the kind of enterprise risk management infrastructure deposit money banks can invest in. In other words, market participants are not playing in the same space on the same terms.

- Secondly, the next question which arises is whether deposit money banks should even be allowed to engage in proprietary derivative transactions through the same entities with which they take deposits. Notably, both the *SEC Derivatives and CCP Rules* and the broader financial regulatory framework are silent on the issue of 'ring-fencing'.[44] (Indeed, based on the current allocation of powers between financial market regulators, it is not at all clear that the SEC can issue regulations on this.)

divisions between the CFTC and the SEC, the [Wall Street Reform and Consumer Protection Act] categorises the derivatives transactions within its scope as either 'swaps', which are subject to primary regulation by the CFTC, 'security-based swaps', which are subject to primary regulation by the SEC, or 'mixed swaps', which are subject to joint regulation by the CFTC and SEC.")

[42] I use "might" because I make this statement against the backdrop of the point made above about the *SEC Derivatives and CCP Rules* being legally impermissible and inconsistent with the peremptory provisions of the ISA 2007.

[43] Securities dealing firms in Nigeria cannot take the kinds of positions that deposit money banks can take as the latter have access to more capital and liquidity.

[44] See generally Steven Schwarcz, 'Ring-fencing' [2013] 87 Southern California Law Review 69-110 and Matthias Lehmann, 'Volcker Rule, Ring-Fencing or Separation of Bank Activities: Comparison of Structural Reform Acts Around the World' [2014] LSE Law, Society and Economy Working Papers 25/2014 <http://eprints.lse.ac.uk/60570/1/WPS2014-25_Lehmann.pdf> accessed 17 January 2020.

- Thirdly, because the CBN is the principal regulator of deposit money banks and enjoys more proximate visibility of deposit money banks' operational affairs, the ability—and indeed capacity of the SEC, which is more familiar with the retail segment—to implement and enforce the risk management provisions spelt out in the *SEC Derivatives and CCP Rules* remain untested. Indeed, those provisions are largely a regulatory wish-list.

3.3.3. Enforceability of Netting Arrangements under Nigerian Law

As explained in chapter 2, the enforceability of a netting arrangements under Nigerian law is connected to the larger question concerning the state of the derivatives regulatory framework in the country for a variety of reasons.[45] Three are particularly important. *First*, enforceable netting arrangements are one of the principal factors responsible for liquid derivatives markets as it engenders certainty and thus increases participation.[46] *Second*, netting equips market participants with the ability to transfer and manage market risk more efficiently, while reducing their exposures to counterparty credit risk.[47] *Third*, regulators recognise netting as a risk reduction tool for the purposes of reducing the amount of regulatory capital financial institutions are obligated to hold in respect of its derivatives positions, thus enhancing regulatory capital efficiency and reducing the accompanying costs.[48] Even the CBN is acutely aware of the advantages of netting because the *Guidance Notes on the Calculation of Capital Requirement for Credit Risk* allows banks, in calculating their capital requirements for credit risk, to recognise the effects of bilateral netting agreements covering repurchase agreement-style transactions on a counterparty-by-counterparty basis if the agreements are legally enforceable in each relevant jurisdiction upon the occurrence of an event of default, regardless of whether or not the counterparty is insolvent.[49]

The enforceability of netting arrangements in Nigeria—against the backdrop of these factors—is critical to the robustness of the derivatives regulatory framework.[50] A clinical exploration of Nigerian law on the enforceability or otherwise of netting agreements (particularly close-out

[45] See chapter 2 at 2.7.
[46] William Bergman, Robert Bliss, Christian Johnson, and George Kaufman, 'Netting, Financial Contracts, and Banks: The Economic Implications' [2004] Federal Reserve Bank of Chicago WP 2004-02 <https://fraser.stlouisfed.org/files/docs/historical/frbchi/workingpapers/frbchi_workingpaper_2004-02.pdf> accessed 31 October 2019.
[47] See generally 2018 ISDA Model Netting Act and Guide at: <https://www.isda.org/a/X2dEE/FINAL_2018-ISDA-Model-Netting-Act-and-Guide_Oct15.pdf>.
[48] See generally BIS, Instructions for Basel III Monitoring (August 2016) <https://www.bis.org/bcbs/qis/biiiimplmoninstr_aug16.pdf>.
[49] This shows the regulator's willingness to recognise the enforceability of netting agreements as a commercial reality for Nigerian banks as far as repos and OTC derivatives are concerned, notwithstanding the surrounding gaps in the overall regulatory framework.
[50] The criticality of netting to derivatives markets has already been discussed in chapter 2.

netting) is therefore essential. Note that 'enforceability' here refers to both in a simple contractual context and in an insolvency context.[51]

3.3.3.1. Netting and Insolvency: Historical Gaps and Challenges

Under Nigerian law, there are broadly two insolvency regimes applicable to failed or failing companies: administration[52] and winding up.[53] The purpose of administration is the rescue of the company, with the functions of the administrator being to rescue the company, the whole or any part of its undertaking, as a going concern, or achieve a better result for the company's creditors as a whole than would be likely if the company were wound up, without first being in administration, or realising the company's properties in order to make a distribution to one or more secured or preferential creditors.[54]

Administration, in effect, allows for troubled companies to deal with their affairs within a favourable framework, imposing a moratorium on winding up and on other legal processes,[55] including on the enforcement of security over the company's property without the permission of the court or the administrator.[56] This is different to winding up (liquidation), which involves the orderly realisation of company's assets for distribution to its creditors and shareholders, after which the company is then dissolved. There are three modes of winding up companies in Nigeria: (a) by the court; or (b) voluntarily; or (c) subject to the supervision of the court.[57] An application for the winding up of a company can be brought by the company, a creditor, an official receiver, a contributory, or a trustee in bankruptcy.[58] A company may be wound up by the court if the company has by special resolution resolved that the company be wound up by the court, or default is made in delivering the statutory report to the CAC, or default is made in holding the statutory meeting, or the company is unable to pay its debts,[59] or the court is of the opinion that it is just and equitable for the company to be wound up.

This was always not the case, however. Before the enactment of the CAMA 2020, Nigerian insolvency law had been liquidation-focused, prioritising the termination of obligations and the

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[51] See ISDA, "The Legal Enforceability of the Close-Out Netting Provisions of the ISDA Master Agreement and their Consequences for Netting on Financial Statements", available at: <https://www.isda.org/a/FgiDE/the->.
[52] Section 443 of the CAMA 2020.
[53] Section 571 of the CAMA 2020.
[54] Lorraine Conway, 'Insolvency: Company Administration', Briefing Paper Number 4915 House of Commons Library (11 December 2019).
[55] Section 480 of the CAMA 2020.
[56] Section 479 of the CAMA 2020.
[57] Section 564 of the CAMA 2020.
[58] Section 564 of the CAMA 2020.
[59] Section 572 of the CAMA 2020.

orderly and fair distribution of an insolvent entity's assets, as opposed to seeking to salvage what could otherwise be a viable business through a reorganisation.[60] Two factors rendered, hitherto, the efficacy of netting agreements between transaction counterparties in an insolvency context in Nigeria legally uncertain. These are (1) mandatory statutory requirements which were activated by an insolvency and (2) the effect of winding up on antecedent transactions which occurred on or around the commencement of the winding up of a transaction counterparty. Table 3.2. which follows sets out the general principle, issues, and legal provisions which the netting provisions in the CAMA 2020 were designed to correct:[61]

Table 3.1.: Historical issues with netting in an insolvency context pre-CAMA 2020

S/N	Issue	General rule	Provision in old law
1.	Cherry picking	The liquidator can select for performance, transactions which it deems beneficial for the purposes of winding up of the company and not perform other transactions it deems onerous (i.e., "cherry pick")	Section 499(1) of the Companies and Allied Matters Act 2004 ("**CAMA 2004**")
2.	Set-off in a liquidation	Set-off in a liquidation insufficient to attempt to rely on insolvency set off to "avoid the spectre of cherry picking"[62]. Issues were: ▪ Mutual set-off is overseen by the liquidator, not the CCP ▪ Claims must be monetary in nature,[63] which means that a claim for delivery of goods (e.g., commodities under a commodity derivative) cannot be set off against a debt[64] or an obligation to deliver identical goods	Section 33 of the Bankruptcy Act
3.	Statutorily prioritised obligations	When a company is being wound up, there are obligations which must guide	Section 494 of the CAMA 2004

[60] See generally Bolanle Adebola, 'Corporate Rescue and the Nigerian Insolvency System' (PhD thesis, University College London 2012).
[61] It is important to note that these provisions continue to exist in the CAMA 2020. However, the netting provisions contained in the CAMA 2020 mitigate them to the extent relevant.
[62] Simon Firth, *Derivatives: Law and Practice* (London: Sweet & Maxwell 2017) 5.006.
[63] Rules 14.1 (3) – (6) of the Insolvency (England and Wales) Rules 2016.
[64] See *Eberles Hotels and Restaurants Co Ltd v E Jonas & Brothers* (1887) LR QBD 459*; Re Bank of Credit and Commerce International* (No 8) [1998] AC 214, 228; and *Re Taylor Ex p. Norvel* [1910] 1 KB 562, 567.

S/N	Issue	General rule	Provision in old law
		the liquidator in the distribution of the company's assets.[65] A major principle here is *pari passu* distribution of debts such that unsecured debts rank equally between themselves in winding up of a company, subject to statutorily preferred debts	
4.	Prohibition on disposition of property and sequestration	The disposition of assets (i.e., payment of the net sum) pursuant to a netting agreement will not be effective once the winding up process has commenced	Section 413 of the CAMA 2004
5.	Fraudulent preferences	Any conveyance, mortgage, delivery of goods, payment, execution, or any other acts relating to property or securities of a company done within three months preceding the commencement of winding up proceedings will be regarded as seeking to confer a preference upon the beneficiary at the expense of other creditors and will be deemed a fraudulent preference and therefore invalid	Sections 495 and 496 of the CAMA 2004 and section 46 of the Bankruptcy Act

3.3.3.2. Netting Reform: Unfinished Business

So, how does the recently enacted netting reform perform? The netting provisions introduced by the CAMA 2020 are set out in sections 718 – 721 of the law. Modelled after the *2006 ISDA Model Netting Act*, they provide the first set of statutory safe harbour provisions ever introduced in Nigerian (insolvency) law. The netting provisions (among other things) (a) make clear that netting agreements "will be enforceable in accordance with their terms, including against an insolvent

[65] The list of statutorily preferred claims are: (1) costs and expenses of winding up; (2) local rates and charges, tax deductions, assessed taxes, land tax, property or income tax due from the company; (3) deductions under the *National Provident Fund Act 1961*; (4) all wages and salaries of workmen in respect of services rendered to the company; (5) all accrued holiday remuneration becoming payable to any clerk, servant, workman or labourer on the termination of his employment as a result of the winding up order or resolution; (6) all amounts due in respect of any compensation or liability for compensation under the Employee Compensation Act, accrued before the commencement of winding up; (7) debts (secured creditors have priority over unsecured creditors); and (8) distribution of net assets to members according to their rights and interests in the company, subject to any contrary provisions in the articles of association.

party, and, where applicable, against a guarantor or other person providing security for a party and will not be stayed, avoided or otherwise limited by (i) any action of the liquidator, (ii) any other provision of law relating to bankruptcy, reorganization, composition with creditors, receivership or any other insolvency proceeding an insolvent party may be subject to, or (iii) any other provision of law that may be applicable to an insolvent party, subject to the conditions contained in the applicable netting agreement."[66] In addition, the provisions statutorily put to rest the fractures laid out in the table immediately above relating to limitations on obligations to make/receive payment or delivery,[67] cherry-picking, [68] insolvency rules potentially limiting set-off,[69] and concerns about fraudulent preferences. [70]

While impactful, the question which arises at this point is: *do these provisions close the fractures in the derivatives regulatory framework (as was intended by lawmakers)*? In other words, *are these provisions enough*? This study finds in the negative. Specifically, it is found that the recent CAMA reforms address defects as to enforceability of netting agreements in a bilateral context only, severely limiting its curative market-wide utility. To be sure, the *2006 ISDA Model Netting Act* from which the provisions are drawn is based on ISDA documentation generally regarded as the standard within the global OTC derivatives markets (especially the global swaps markets). The intent behind the close-out netting content contained in the *2006 ISDA Model Netting Act* as explained by ISDA itself is laid out as follows:[71]

> "For *swap dealers*, which specialize in bringing counterparties together for transferring risk, the need for netting stems from the dealer's central role in risk intermediation. Each time a *dealer* enters into a transaction with a counterparty, the dealer takes on exposure to the transferred risk. The dealer does not normally wish to retain the exposure, however, so it enters into offsetting hedge transactions. By maintaining a matched book—or more accurately, balanced book—of offsetting transactions, the *dealer* avoids unwanted exposure to movements in interest rates, currencies, and other sources of market risk. The result of this hedging activity is that, over time, the aggregate of derivatives activity includes a large number of *inter-dealer* and other hedge transactions that function largely to adjust risk positions and limit exposure to market movements" (*emphasis* on dealers *added*).

Clearly, the intent behind the *2006 ISDA Model Netting Act* is to create a safe harbour for the activities of the relevant market participants on the ends of these (bilateral OTC) transactions, not the infrastructures which might be effecting multilateral CCP netting. As such, it is an interpretative mistake to construe language intended to provide solutions to bilateral problems as having provided

[66] Section 721(1) of the CAMA 2020.
[67] Section 721(2) of the CAMA 2020.
[68] Section 721(4) of the CAMA 2020.
[69] Section 721(6) of the CAMA 2020.
[70] Section 721(6) of the CAMA 2020.
[71] David Mengle, 'The Importance of Close-Out Netting' [2010] ISDA Research Notes No 1 2.

same to multilateral problems. This misunderstanding is rampant in the Nigerian derivatives market.[72] Instructively, ISDA further notes:

> "In most countries, it has been necessary to enact specific netting legislation in order to achieve statutory recognition of the elements of the netting process described above; the ISDA Model Netting Act provides a template for such legislation."

In addition to gaps relating to netting which remain on the multilateral end, the changes which ought to have been introduced to correct definitional inconsistencies and institutional/jurisdictional conflicts in Nigeria with a view to advancing the regulatory robustness of the regulatory framework (especially CCPs)[73] remain unattended to. One might then ask how this legislative oversight came to be since the much-heralded review of the country's company law only just occurred. Chapter 4 answers that question (among other things). The fractures which exist in the regulatory framework as it concerns CCP multilateral netting are explored further below at 3.3.3.

We now turn to additional netting reform contained in the BOFIA 2020 and its utility in enhancing the derivatives regulatory framework. There is, of course, a need to pay special attention to deposit money banks in insolvency because in Nigeria they are the major drivers of liquidity in the financial system due to their ability to take deposits, and because they are the major participants in the derivatives segment either for their own account or for clients. (They are also clearing members in clearing houses.) Due to the crucial role(s) they play in the financial system, there exists a special insolvency regime for banks which fail in Nigeria.[74] In such an instance, the CBN does have resolution powers.[75]

To be constructive in derivatives markets, the banking regulator's resolution powers should not, of course, (just like a liquidator or administrator) disrupt contracts between a failing bank and its counterparties, including financial contracts specifically designed to protect counterparties in such circumstances (when it comes to netting or collateral arrangements). Therefore, resolution powers ought to be expressly disapplied in cases where they will clash with the rights of a clearing entity or a transaction counterparty. In other words, the CBN ought not to be able to make property

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[72] It would appear that this misunderstanding even extends to infrastructures within the Nigerian derivatives market. See "CAMA 2020 Netting Provisions: Game Changer for FMDQ Derivatives and Central Counterparty Agenda, Positions Nigerian Financial Market for Radical Transformation", available at: <https://fmdqgroup.com/cama-2020-netting-provisions-game-changer-fmdq-derivatives-central-counterparty-agenda-positions-nigerian-financial-market-radical-transformation/>.

[73] Craig Pirrong, The Economics of Central Clearing: Theory and Practice (2011) (ISDA Discussion Paper Series No 1) 3 <https://www.isda.org/a/yiEDE/isdadiscussion-ccp-pirrong.pdf> accessed 26 December 2018 ("It is vital that CCPs have the highest level of confidence that their purported arrangements here will perform as advertised during and after a default.")

[74] This reform was only just enacted in 2020.

[75] These powers are set out in the NDIC Act 2006 and the BOFIA 2020.

transfer orders with respect to failing entities which will modify or render unenforceable the default rules of a clearing entity or the rules for the settlement of market contracts by a clearing entity, neither should the banking regulator be able to interfere with the rights of a clearing entity.[76]

These understood, turning, then, to the relevant law, section 54(1) of the BOFIA 2020 stipulates that notwithstanding what is contained in any other law or regulation (including the CAMA 2020), where the licence of a bank or other financial institution is being revoked, or a liquidator is appointed:

> "any provision contained in a written netting agreement to which the bank or other financial institution is a party, or any netting rule or practice applicable to the bank or other financial institution, shall be binding on the liquidator in respect of (a) any payment or settlement instruction which has been delivered to another bank or other financial institution, a service provider or to the [CBN] prior to the revocation, winding up order, or appointment of the liquidator and which the instruction (i) is subject to calculation and determination through netting; or (ii) may result in a payment or settlement obligation, which obligation is to be discharged on or after the date of the revocation, the winding up, or appointment of the liquidator, as the case may be; or (b) any payment or settlement obligation (i) which has been determined through netting prior to the revocation, the issue of the winding up order or appointment of the liquidator; or (ii) which is to be discharged on or after the date of the revocation, the winding up order, the appointment of the liquidator, or the discharge of which was overdue on the date of the winding up order, [or] appointment of the liquidator"

Section 54(2) goes on to add:

> "any asset of a bank or other financial institution which the bank or other financial institution, prior to the revocation or issue of its winding up order has provided (a) to the [CBN] or any other bank or other financial institution or any person as security for a loan in respect of its settlement obligation, may be utilised by the [CBN] to the extent required for the discharge of that settlement obligation; or (b) in terms of a written agreement with a service provider, to the service provider as security in respect of its payment obligation, may be utilised by the service provider to the extent required for the discharge of that payment obligation"

The question which therefore follows is: *do these provisions address the challenges outlined in the present chapter in relation to (a) multilateral CCP netting and (b) absence of statutory endorsement for CCP operations discussed below (especially settlement finality)*. (Separately, note that the netting provisions contained in the BOFIA 2020 do not impose restrictions on the CBN as resolution authority when it comes to dealing with netting arrangements failing banks may be party to which concern (1) suspension of the exercise of termination rights, (2) transfer of assets and (3) exercise of bail-in powers, exercisable by resolution authorities. The effects of this gap are discussed in chapter 5.)

[76] FSB, Key Attributes of Effective Resolution Regimes for Financial Institutions (October 2011).

Turning back to the issue of multilateral CCP netting, the answer to the question posed above is: only partially. *How so*, one might ask. In extending protection to a CCP, the BOFIA 2020 provisions are helpful, but only to the extent that a clearing member on a CCP is a failing bank or other financial institution whose default event (and multilateral netting event in question) on the clearing system is triggered by its insolvency or the revocation of its operating licence. Given this, what then happens to the CCP where the clearing member is a SEC-regulated securities dealing firm on a CCP, not a CBN-regulated bank or other financial institution? This, of course, remains a gap.

As to whether section 54(2) of the BOFIA 2020 advances the cause of settlement finality, again, the answer is: only partially. Section 54(2)(b) is only useful to the extent that a defaulting clearing member is a bank or other financial institution whose default event (and multilateral netting event in question) on the clearing system is triggered by its insolvency or the revocation of its operating licence. Again, what happens where payment made to a beneficiary (say, a CCP) pursuant to a multilateral netting or transfer order on a clearing system unconnected to a bank insolvency or revocation scenario is disputed by a clearing member in a court in contract or by a third party in tort (for example, an aggrieved creditor (say a private equity firm) with proper standing)? After all, roughly similar litigation was a key factor in the failure of the *Caisse de Liquidation des Affaires en Marchandises* in France in 1974.[77] These show that the netting reform in the BOFIA 2020 is only useful for banks and security takers who are their counterparties.[78] It does not advance market-wide derivatives reform in the country.

3.4. Appurtenant Infrastructure: Analysis

Since the merits of market infrastructures (particularly clearing entities and how they help manage financial market risks) have been discussed,[79] the gaps which have been found in the exploration of the Nigerian markets infrastructure landscape will now be discussed at this point.[80] To be able to adequately support a vibrant derivatives market, CCPs in a financial system must be robust. Helpfully, Braithwaite and Murphy have dimensioned the elements of this. To be robust, (1) a CCP's failure must be highly unlikely, (2) a CCP's operations must be highly reliable, and (3) a CCP's processes must be legally certain (the "**Braithwaite-Murphy Test**").[81] A combination of

[77] Vincent Bignon and Guillaume Vuillemey, 'The Failure of a Clearinghouse: Empirical Evidence' [2017] Banque de France Working Paper No 638.
[78] Note that section 54(2)(a) even refers to 'loans'.
[79] See chapter 2 at 2.11.2.
[80] The view in this study is that the most important infrastructure relevant to derivatives trading is CCPs.
[81] Joanne Braithwaite and David Murphy, Got to be Certain: The Legal Framework for CCP Default Management Processes [2016] Bank of England Financial Stability Paper No 37

these, broken down into key components, form the analytical framework which this chapter employs below in analysing the legal status of CCPs in Nigeria.

3.4.1. Adequacy of Financial Resources

At the most elemental level, we shall proceed by first assessing whether CCPs in Nigeria are robustly capitalised and adequately resourced to do that which they are founded to do. After all, the overriding premise for these institutions is to reduce risk in financial markets [82] and to be able to protect themselves from financial risk posed by clearing members. Therefore, they do need to have adequate financial resources, based on contributions from clearing members (collateral posted to meet margin and default funds) and their own capital because CCPs "[facilitate] netting in the ordinary course of events; and, most importantly for these purposes, [they hold] financial resources allowing [them] to act as […] shock absorber[s] for the market if a participant fails."[83]

Rule 2, part b, of the *SEC Derivatives and CCP Rules* provide that a CCP shall hold "evidence of minimum capitalisation of ₦5 billion" which is *circa* $13,718,034,698.76.[84] The question which follows is: *how was this requirement reached*? Notably, there is nothing in the regulatory framework which helps answer this question.[85] In sharp contrast, recital 48 of EMIR provides:

> "Authorisation of a CCP should be conditional on a minimum amount of initial capital. Capital, including retained earnings and reserves of a CCP, should be proportionate to the risk stemming from the activities of the CCP at all times in order to ensure that it is adequately capitalised against credit, counterparty, market, operational, legal and business risks which are not already covered by specific financial resources and that it is able to conduct an orderly winding-up or restructuring of its operations if necessary."

Article 16 then goes on to stipulate a capital requirement:

> "A CCP shall have a permanent and available initial capital of at least EUR 7.5 million to be authorised …"

Article 16(3) provides *inter alia* that the "[European Banking Authority] shall, in close cooperation with the [European System of Central Banks] and after consulting [European Securities and

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<https://www.bankofengland.co.uk/financial-stability-paper/2016/got-to-be-certain-the-legal-framework-for-ccp-default-management-processes> accessed 16 March 2020.

[82] Froukelien Wendt, 'Central Counterparties: Addressing their Too Important to Fail Nature' [2015] IMF Working Paper WP/15/21 <https://www.imf.org/external/pubs/ft/wp/2015/wp1521.pdf> accessed 11 March 2020 ("…a CCP that is well designed and [capitalised] insulates counterparties from one another.")

[83] Joanne Braithwaite and David Murphy, 'Central Counterparties (CCPs) and the Law of Default Management' [2017] 17(2) Journal of Corporate Law Studies 291-325.

[84] Using the prevailing exchange rate as at 3 February 2020.

[85] The researcher engaged some market participants in the jurisdiction on this and no one could provide any clarity as to how this sum was reached. From all indications, it was randomly selected.

Markets Authority], develop draft regulatory technical standards specifying requirements regarding the capital, retained earnings and reserves of a CCP". What this demonstrates is instructive. It shows that there is some rigour and methodology expected in the generation of CCP minimum capital requirements in the European Union. In sharp contrast, no justification or methodology could be found in the course of the present research as to why/how the SEC settled on ₦5 billion, thereby raising questions as to the adequacy of this figure in terms of assuring robustness[86] or whether it was systematically generated.[87] This fails the Braithwaite-Murphy Test conceptualised above. The danger of this and why it might pose an issue when it comes to managing counterparty (and systemic) risk in the Nigerian derivatives market is expanded on from a comparative perspective in chapter 5.

3.4.2. Specific Findings on Default Management in the OTC FX Futures Market

Turning next to default management, it is already well understood that the major advantage of central clearing is that participants do not have to contend with the credit risk of counterparties. How a CCP manages the default of its members is intricately connected to the neutering of counterparty credit risk and, by extension, systemic risk. Principle 13 of the CPSS-IOSCO Principles explains:

> "A [CCP] should have effective and *clearly* defined rules and procedures to manage a participant default. These rules and procedures should be designed to ensure that the [CCP] can take timely action to contain losses and liquidity pressures and continue to meet its obligations" (*emphasis added*).

This understanding,[88] which is the settled global regulatory approach is prevalent in the Nigerian derivatives framework as well, and might explain why rule 2, part a, of the *SEC Derivatives and CCP Rules* clearly specifies that the rules apply to both exchange-traded derivatives and standardised OTC derivatives.

To effectuate a default management process, as explained in chapter 2,[89] clearing members who meet the CCP's operational and financial criteria enter into a membership agreement with the CCP which will incorporate the CCP's rulebook and set out the clearing entity's default rules. Testing

[86] Buttressing this point, it has been highlighted that "CCPs are reliant on risk models to quantify the level of financial resources they need to operate safely." See BOE, Supervision of Financial Market Infrastructures — Annual Report (For the period 21 February 2018 — 14 February 2019) available at: <https://www.bankofengland.co.uk/-/media/boe/files/annual-report/2019/supervision-of-financial-market-infrastructures-annual-report-2019>.

[87] At the same time, the required minimum capital cannot be disproportionately high as that would raise the question as to needless overcapitalisation.

[88] See generally chapter 2.

[89] See chapter 2 at 2.8.2.4.

the robustness of the default management rules in Nigeria's most active derivatives market—the OTC FX futures market—is a necessity.[90] Because the Nigerian derivatives market and regulatory framework is in a relatively nascent stage, we shall turn to English law for comparative guidance. English case law helps us understand that it is of utmost importance that contractual arrangements between a CCP and its members and the relevant default management rules must be clear and incontrovertible. In *ED&F Man Commodity Advisers Limited v Fluxo-Cane Overseas Limited*,[91] a clearing member claimed that its terms with a CCP had been varied during a default. Subsequent litigation turned on whether a conference call constituted a binding agreement by brokers to liquidate the trader's positions in a way other than was documented in the agreement. This was denied by the brokers, who had each closed-out as they thought fit. Although the Court of Appeal went on to find that the factors for a binding contract were not existent and therefore there was no agreement to close out in the manner the trader contended, the fact that the issue was open to litigation and proceeded as far as it went, despite the CCP's rules, demonstrates why absolute clarity is needed as it relates to the documentation of default rules.

The question which therefore follows concerns whether the default management rules in this important Nigerian derivatives market are clear, so that they prevent the prospect of a similar case occurring in the local derivatives market, as recommended by principle 13 of the CPSS-IOSCO Principles. Section 6.3(i) of the *OTC FX Futures Market Operational Standards* sets out the prevailing default management process.[92] It provides:

> "Where an Event of Default occurs, the cash-equivalent of the Initial Margin requirement on all the defaulting [dealing member bank's] open contracts, and estimated potential loss amounts, shall be immediately debited to the [dealing member bank's] CBN operating account by the Clearing Agent."

"Clearing Agent" is defined in the *OTC FX Futures Market Operational Standards* as "FMDQ Clear Limited or such other clearing agent as may be designated by FMDQ".[93] While this is documented as such in the rules, in practical terms, it remains unclear how a clearing agent can procure that a defaulting counterparty's account with the CBN be debited to cover losses given that there is no document in the existing framework upon which such debits could be predicated. Due to basic contractual privity rules, this provision contemplates a chain of contractual relationships between the clearing entity, the clearing members, and the CBN. Such a contract will have to be

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[90] This comports with the conceptualisation of a robust derivatives regulatory framework constructed in chapter 1 at 1.2.

[91] [2009] EWCA Civ 406.

[92] See "FMDQ OTC FX Futures Market Operational Standards", available at: <https://www.fmdqgroup.com/wp-content/uploads/2018/08/OTC-FX-Futures-Market-Operational-Standards-August-16-2018.pdf >.

[93] Ibid. See "Definitions" section.

executed by the CBN, the clearing entity, and all the banks in the OTC FX futures market. Engagement with local market participants provided no clarity that such documentation exists.

Further, as noted above, a crucial finding of this research is that in the OTC FX futures market, the CBN is the only seller of futures contracts, which indicates that the reserve bank is using the product as a tool to manage foreign currency demand. This in itself would not be an issue; however, it is noteworthy that the event of default provisions in the *OTC FX Futures Market Operational Standards* are crafted as though the CBN can never be in default; the rules are simply silent on the point. As explained below in this chapter, the CBN is an especially aggressive regulator in the Nigerian financial system, with a penchant for exceeding its core statutory mandate.[94] Therefore, a distress scenario is not impossible. [95] Even if the prospect of the reserve bank becoming insolvent may be more remote than usual,[96] there are other obligations, for example, posting of sufficient margins, which the CBN could very well be in violation of. The rules simply do not provide for these kinds of scenarios. The researcher engaged with personnel from the relevant local market infrastructure on this matter, on a no-name basis, and was informed that in such a case the CBN's account "would be debited to cover any loss".[97] Again, this is not documented anywhere in the existing framework and a basis for the understanding provided by the clearing entity's personnel was not satisfactorily articulated.[98] This fails the Braithwaite-Murphy Test conceptualised above. This dissertation submits, as such, that the event of default provisions which gird the OTC FX futures have no basis, whether statutory or contractual, and some of the key protections they purport to offer are unimplementable.

3.4.3. Default Management on CCPs, Netting, and Intersection with Insolvency Law

Leaving the OTC FX futures market and its peculiarities and exploring more generally the matter of default management on a Nigerian CCP, the event of default which most worries market participants and regulatory actors is the insolvency of clearing members as typical insolvency principles, which are activated in such circumstances, could potentially interfere with the default management procedures of a CCP. This is because (among other things) a clearing entity would have to both manage a default and deal with an insolvency (and all the complexities which come with that).

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[94] See below at 3.4.

[95] This is not an impossible prospect if the sovereign is in distress.

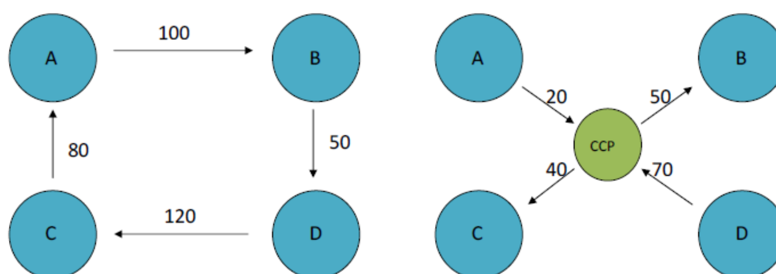
[96] Philipp Bagus and David Howden, 'Central Bank Insolvency: Causes, Effects and Remedies' [2014] 39(1) The Journal of Social, Political and Economic Studies 3-19.

[97] Details of engagement on file with researcher.

[98] *Scandinavian Trading Tanker Co AB v Flota Petrolera Ecuatoriana* (The Scaptrade) [1983] QB 529 ("It is of the utmost importance in commercial transactions that, if any particular event occurs which may affect the parties' respective rights under a commercial contract, they should know where they stand.")

As already explained,[99] multilateral netting is integral to the ability of a CCP to serve the risk mitigation function in financial markets that it is now known for. Recall that netting within and by a CCP is heralded as one of the reasons why they are now highly regarded infrastructures.[100] Using a stylised market of four participants, Cont and Kokholm sketch how the sum of bilateral exposures which amounts to 350, taking into account bilateral netting, is further reduced to 180 under multilateral netting on a CCP,[101] reiterating why CCPs are now indispensable in modern derivatives markets.[102] Figure 3.6. depicts how this would work.

Figure 3.6.: Multilateral netting on a CCP



Source: Rama Cont and Thomas Kokholm, Central Clearing of OTC Derivatives: Bilateral vs Multilateral Netting (paper presented at the Global Derivatives Conference 2011, the 5th Financial Risks Forum: Systemic Risk, the European Institute on Financial Regulation (Paris, 2011)) <https://arxiv.org/pdf/1304.5065.pdf> accessed 13 March 2020.

Since this study has found that the netting provisions contained in the CAMA 2020 are "intended to set out, by example, the basic principles necessary to ensure the enforceability of bilateral close-out netting … as well as the enforceability of related financial collateral arrangements",[103] it follows, then, that one must conclude that the law does not extend cover to CCPs' operations in Nigeria, particularly multilateral close out netting effected by CCPs—which is designed to entrench operational market efficiency and market-wide legal certainty—in insolvency scenarios.

As explained above, the safe harbour provisions contained in the Nigerian netting law contemplates netting agreements between two market participants, not netting agreements between a participant and (or on) a clearing entity.[104] Therefore, it is in respect of the insolvency gaps in the former

[99] See chapter 2 at 2.7.
[100] Ibid.
[101] Rama Cont and Thomas Kokholm, Central Clearing of OTC Derivatives: Bilateral vs Multilateral Netting (paper presented at the Global Derivatives Conference 2011, the 5th Financial Risks Forum: Systemic Risk, the European Institute on Financial Regulation (Paris, 2011)) <https://arxiv.org/pdf/1304.5065.pdf> accessed 13 March 2020.
[102] This provides additional insight into why this dissertation conceives robust appurtenant infrastructure as being integral to a well-ordered derivatives regulatory framework.
[103] See "ISDA Memorandum on the Implementation of Netting Legislation: A Guide for Legislators and Policy Makers" (March 2006) <https://www.isda.org/a/vNTDE/ModelNettingActMemo.pdf> accessed 13 March 2020.
[104] Craig Pirrong, The Economics of Central Clearing: Theory and Practice (2011) (ISDA Discussion Paper Series No. 1) 33 <https://www.isda.org/a/yiEDE/isdadiscussion-ccp-pirrong.pdf> accessed 26 December

context that the new Nigerian netting law applies, not the latter. This is, of course, not helpful, if Nigerian CCPs are to help safeguard the stability of the post GFC financial markets in this crucial emerging market. On this, Braithwaite and Murphy note: "Indeed, it is a prerequisite of this part of the regulatory response to the financial crisis that CCPs are able to apply their default rules in a predictable way, as it would be self-defeating if the public sector were to allow insolvency laws to weaken one of the principal financial stability measures."[105] Providing further comparative guidance, article 48 of the EMIR stipulates that a "CCP shall verify that its default procedures are enforceable."

Professor Philip Wood explained to the researcher how legislation must be crafted to properly extend statutory cover to safeguard the efficiency of multilateral netting in an insolvency thus:

> "the problem of multilateral netting is as follows: draw a triangle with A, B, and C. A owes 100 to B, B owes 100 to C, C owes 60 to A. B goes bust. Under the multilateral netting rules of the clearing house, B's claim for 100 versus A is transferred to C so that C and A can set-off bilaterally. The overall result is that A owes 40 to B. But the transfer by B under the rules is void as a post-commencement disposal (usually). So, *the legislation must allow this divestment of the asset of the insolvent B after commencement of its insolvency—some statutes do* (it is like a creditor removing the debtor's sofa). *CCPs avoid this problem because the claim owed by A to B is on first origination converted by the rules into a claim owed by A to the CCP and then by the CCP to B - mirror claims. The result is that on B's insolvency the 100 is mutual between the CCP and B. All market claims are routed through the CCP, so you get universal mutuality between the bankrupt and the CCP*." (*emphases added*).[106]

Described differently, to preserve financial stability and ensure legal certainty, a derivatives law must sanction the rules and operational steps which a CCP constructs to enable it effect multilateral netting in its markets, going so far as to safeguard the rules from traditional insolvency law. Fatally, the recently passed netting law omits this in its entirety. This, of course, fails the Braithwaite-Murphy Test conceptualised above. Chapter 4 offers a theory as to how this occurred.

Mindful that creative transaction lawyers may assess that since the netting provisions create a safe harbour in relation to agreements "between two parties"[107] and as "parties" is defined as "a person constituting one of the parties to a netting agreement",[108] it may be possible to design clearing membership agreement (and clearing rules) after the ISDA Master Agreement and construct

2018 ("If position or exposure netting are unenforceable, upon a CCP default (a) the non-defaulting party is at risk of becoming an unsecured creditor with respect to those positions that are in the money, and becoming fully liable for amounts owed on out of the money positions, and (b) non-defaulting parties may have to replace gross positions, rather than (smaller) net positions)".

[105] Braithwaite and Murphy (n 101).

[106] Private correspondence between researcher and Professor Philip Wood CBE, QC (Hon), MA (Oxford), LLD (Hon, Lund) on Wednesday, 11 March 2020; details on file with researcher.

[107] Section 718 of the CAMA 2020.

[108] Section 718 of the CAMA 2020.

language therein artfully such that the protection afforded to bilateral derivative transactions will extend to those subject to multilateral clearing on CCPs. While plausible, this study would contend that such an approach would be dangerous as the back end clearing structure and documentation would differ from CCP to CCP, therefore encouraging fragmentation and regulatory arbitrage.[109] Recall that in Nigeria, there are currently two clearing entities, FMDQ Clear Limited and NG Clearing Limited. Therefore, apart from worries about fragmented compliance standards, it would mean that clearing members on an infrastructure would never really enjoy the legal certainty enjoyed by participants in wholesale bilateral transactions.[110] In addition, any comfort would be merely contractual, not statutory, which is the protection that safe harbour provisions enshrined in law afford. This dissertation finds, as such, that gaps remain, infrastructure-wise, in relation to the general application of conflicting insolvency law for CCPs as it relates to market contracts, market charges, market property, and CCP default rules in Nigeria. Chapter 5 sets out the regulatory approaches the UK and South Africa have adopted in curing this fracture.

3.4.4. Settlement Finality

Turning next to settlement finality. Integral to the appurtenant infrastructure underpinning derivatives markets (and indeed the broader construct of modern financial markets) is the concept of finality or final transfer (known generally as 'settlement finality'),[111] which concerns the exact point at which payment, settlement, and related obligations are discharged.[112] The importance of this in modern markets has long been clear. The BIS highlights:

> "Finality is important because when it occurs -- which depends upon applicable rules and laws -- the interbank obligations generated in the interbank payment, clearing and settlement process are discharged. Thus, the credit, liquidity and systemic risks generated in this process, particularly interbank risks, may similarly be extinguished. Furthermore, from a broad perspective, finality is the point at which a money transfer process is completed."[113]

'Final settlement' is defined as "the irrevocable and unconditional transfer of an asset or financial instrument, or the discharge of an obligation by the securities settlement facility or its participants in accordance with the terms of the underlying contract."[114] *Why is it important*? For our purposes, again, any concerns as to the prospect of a close-out netting being unwound in a bilateral derivatives

[109] More is said on this point below at 3.4.
[110] See *British Eagle v Compagnie Nationale Air France* [1975] 1 WLR 758.
[111] See generally The Giovannini Group, Cross-Border Clearing and Settlement Arrangements in the European Union (November 2001) <https://www.ebf.eu/wp-content/uploads/2017/07/First-Giovannini-Report-on-Clearing-Settlement-in-the-EU-2001.pdf> accessed 27 January 2020.
[112] BIS, Central Bank Payment and Settlement Services with Respect to Cross-Border and Multi-Currency Transactions (September 1993) 9 <https://www.bis.org/cpmi/publ/d07.pdf> accessed 27 January 2020.
[113] Ibid.
[114] Reserve Bank of Australia, *Clearing and Settlement Facilities: Financial Stability Standards* (2009).

transaction also exist in a multilateral context as well, particularly when it comes to clearing entities.[115] To this end, principle 8 of the CPSS-IOSCO Principles provide that "[an] FMI should provide clear and certain final settlement, at a minimum by the end of the value date. Where necessary or preferable, an FMI should provide final settlement intraday or in real time".[116] Therefore, an instruction or obligation which a clearing entity accepts for settlement in line with its rules should be settled with finality on the relevant value date; anything other than the foregoing can ignite credit, liquidity, and/or systemic risk in a financial market. The components which the Nigerian regime need to possess to support finality are:[117] (a) enforceability of net settlement against third parties, (b) contractual irrevocability of transfer/payment orders, (c) exclusion of the inability to backdate the effects of insolvency decisions to the first hour of the day of the pronouncement of an insolvency decision, and (d) enforceability of collateral arrangements.

Using Europe as an example, underpinning multilateral clearing/netting is the *Directive 98/26/EC of the European Parliament and of the Council of 19 May 1998 on Settlement Finality in Payment and Securities Settlement Systems* which makes clear that transfer orders and netting between market infrastructure participants are legally enforceable and binding on third parties even in the context of a participant's insolvency.[118] Additionally, any revocation of a transfer order by a participant or a third party will be of no legal effect.[119] With regard to CCPs especially, it has been highlighted:

> "A critical issue in a CCP's money settlement arrangements is the timing of the finality of funds transfers between the CCP's accounts and the accounts of its participants at the banks used to effect such settlements. The funds transfers should be final (irrevocable and unconditional) when effected (when accounts are debited and credited). The laws of the relevant jurisdictions should support the provisions of the CCP's legal agreements with its settlement banks relating to finality. Similarly, there should be a clear and effective legal basis for the finality of the transfers of financial instruments."[120]

Unlike the case with bilateral close-out netting in Nigeria, for all the reasons already set out above, this dissertation finds that it is not the case that transfer orders accepted by Nigerian clearing entities can indeed be regarded as settled and safe from the prospect of being unwound after they are so entered (especially in a market participant's insolvency scenario). Astoundingly, while the *SEC*

[115] See the operational sketch of clearing entities expanded on in chapter 2, especially as it relates to clearing and netting.
[116] CPSS-IOSCO Principles <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD377-PFMI.pdf>.
[117] Diego Devos, Legal Protection of Payment and Securities Settlement Systems and of Collateral Transactions in European Union Legislation (paper presented at International Monetary Fund, Washington, DC, 23-27, October 2006) <https://www.imf.org/external/np/seminars/eng/2006/mfl/dd.pdf>.
[118] Article 2(a) of Directive 98/26/EC.
[119] Article 3(1) of Directive 98/26/EC.
[120] CPSS-IOSCO, *Recommendations for Central Counterparties* (2004) <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD176.pdf>.

Derivatives and CCP Rules do stipulate that the rules of a CCP shall "provide for settlement finality", it does not provide any guidance as to how they should do so.[121] This is a very important point, because this dissertation submits that Nigerian clearing entities are not able to, in fact, provide for settlement finality within the current legal and regulatory framework.

To put it differently, because clearing entities in Nigeria are organised as companies, in the absence of a law explicitly creating the regulatory framework for them to "provide for settlement finality", extant provisions of insolvency law will be activated in a participant's insolvency, notwithstanding what the clearing entity would have provided for. Similarly, in relation to CCP's default management procedures, rule 26, part b, of the *SEC Derivatives and CCP Rules* stipulates—unrealistically, it is submitted—that CCPs' shall "ensure that the application of previously provided collateral will not be subject to prevention, stay, or reversal by any applicable law". This fails the Braithwaite-Murphy Test conceptualised above and is an untenable imperative under the current regulatory framework in a counterparty's insolvency. In all these cases, it is submitted that the rules of a clearing entity must necessarily be subjugated to insolvency law as there is no lawful basis to predicate their legal effectiveness upon in the current regulatory regime.

3.4.5. Financial Collateral and Taking Security

Let us then consider financial collateral, as this goes together with close-out netting in derivatives markets. ISDA explains how this works:

> "Upon a default, close-out netting occurs first and only then is financial collateral applied. Under a title transfer based financial collateral arrangement, enforcement typically occurs via the close-out netting mechanism."[122]

Financial collateral arrangements—involving "delivery of financial assets as security or 'quasi-security' for financial obligation"[123]—are crucial contraptions in derivatives and modern markets. Indeed, it has been noted that "[c]ollateral flows lie at the heart of any proper understanding of market liquidity, and hence of financial stability."[124] There are two types of collateral arrangements in derivatives markets: (a) charges and (b) title transfers.[125] Under the former, security interest over collateral is granted in favour of the grantee. The grantor retains proprietary interest, however,

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[121] It is submitted that the *SEC Derivatives and CCP Rules* asks clearing houses to do the impossible.

[122] See "2018 ISDA Model Netting Act and Guide", available at: <https://www.isda.org/a/X2dEE/FINAL_2018-ISDA-Model-Netting-Act-and-Guide_Oct15.pdf>.

[123] Edward Murray, "Financial Collateral Arrangements and the Financial Markets", in Frederique Dahan (eds) *Research Handbook on Secured Financing in Commercial Transactions* (Edward Elgar Publishing 2015) chapter 11 286-325.

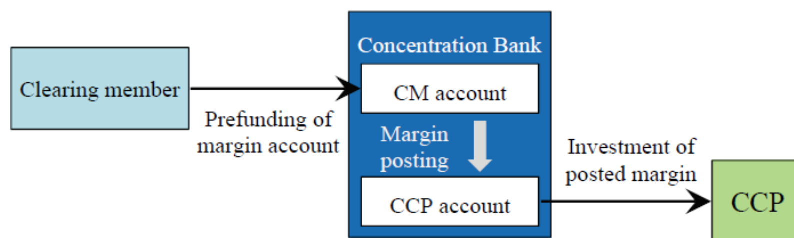
[124] Manmohan Singh, 'Collateral Reuse and Balance Sheet Space' [2017] IMF Working Paper WP/17/113 5.

[125] Firth (n 82) 6.018.

entitling it to the return of the collateral upon discharge of liabilities. Under the latter, the grantor transfers all its interest in collateral to the grantee with a contractual right of return upon the discharge of liabilities.

Because securities (i.e., shares and debt instruments) and cash will typically be used as financial collateral to underpin derivative transactions, testing the efficacy of the collateral and security regime in Nigeria as part of the infrastructure for the derivatives market is important. For this purpose, as with settlement finality above, European law i.e., the *EU Directive on Financial Collateral Arrangements* is employed as a direct comparator and what happens in that jurisdiction. In the context of CCP clearing, cash collateral, which is typically provided by title transfer, will often be extended to the recipient *via* a concentration bank, with clearing members and the CCP having accounts at the same bank. The margin posting would typically be made by the CCP instructing the bank to move funds from clearing members' account to its own account. In this way, outright ownership of the collateral asset (i.e., the cash) passes from the member to the CCP. The CCP informs the clearing member of upcoming margin calls and the clearing member ensures there are funds in its account to meet said calls.

Figure 3.7.: Cash flows in typical cash margin posting

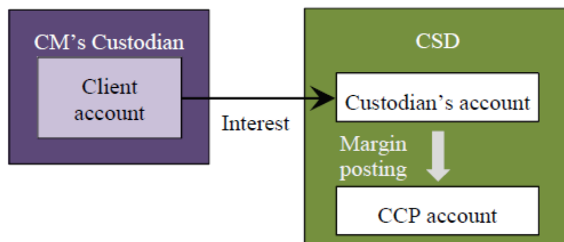


Source: Joanne Braithwaite and David Murphy, Got to be Certain: The Legal Framework for CCP Default Management Processes [2016] Bank of England Financial Stability Paper No 37 <https://www.bankofengland.co.uk/financial-stability-paper/2016/got-to-be-certain-the-legal-framework-for-ccp-default-management-processes> accessed 16 March 2020 12.

Similarly, it is possible to post securities collateral to clearing entities. While the specifics would be dependent on the type of collateral and the collateral agreement, typically, the CCP will have an account with a central securities depository, as will the CCP itself or its custodian. To post securities collateral, the clearing member will instruct its custodian to settle a transfer of the securities into the CCP's account. This bears operational resemblance to a title transfer.[126]

[126] It is vital to highlight that the notion of trusts underpin these securities custody arrangements: a custodian holds client's interests as trustee, while a central securities depository holds the rights in the securities as trustee for the custodian, and on and on.

Figure 3.8.: Typical flows in securities margin posting



Source: Joanne Braithwaite and David Murphy, Got to be Certain: The Legal Framework for CCP Default Management Processes [2016] Bank of England Financial Stability Paper No 37 <https://www.bankofengland.co.uk/financial-stability-paper/2016/got-to-be-certain-the-legal-framework-for-ccp-default-management-processes> accessed 16 March 2020 12.

Note that under the cash title transfer approach, cash held in a bank account is a claim against the bank,[127] with posting being effected by book entry, so property is not actually transferred between the member and the CCP. Under the securities collateral approach, too, the member passes full title in its interest in the securities to the CCP, with a right to get equivalent collateral back once its obligations are discharged. So, what has been achieved globally is the ability to efficiently demise title in collateral assets in derivatives markets.

Let us compare this to the collateral and security taking regime in Nigeria. Under Nigerian law, security can be taken over personal property (by way of mortgage), securities (by way of charge), licences,[128] insurance proceeds, bank accounts, real property (by way of mortgage), contractual rights, goodwill, receivables, and intellectual property. A security interest can be created *via* a fixed or floating charge. A fixed charge is created where the parties expressly state that they have so created a fixed charge and it attaches to specific assets (e.g., plant equipment). Where the charge is a floating charge, the chargor controls the charged assets until the charge crystallises into a fixed charge following certain events stipulated under the security document.[129]

In Nigeria, crucially, security created by companies must be perfected.[130] This entails (a) stamping of the security document at the Stamp Duties Office, Federal Inland Revenue Service[131] (b) the

[127] See *Foley v Hill* (1848) 2 HLC 28.
[128] Because these would typically be personal to the licensee, consent of the issuing authority would usually need to be procured, after which they would then be assigned by way of security.
[129] *Re Yorkshire Woolcombers Association* [1903] 2 Ch D 284.
[130] 'Mortgages' and 'charges' are considered herein as one because there is little practical difference for the purpose of the present discussion.
[131] Note that under section 22 of the *Stamp Duties Act 2004*, an unstamped document cannot be tendered in evidence save for in criminal matters.

registration of the security document at the CAC[132] (for some kinds of security interests)[133] and (c) registration at the relevant state Lands Registry (if land forms part of the security) and at the Nigerian Civil Aviation Authority aircraft registry[134] or ships' registry[135] (where security is taken over an aircraft or a ship). In terms of enforcement, a security taker would be required to comply with the provisions of the security documentation on the enforcement of security. Generally, such documents would provide for enforcement of the security either *via* the exercise of the power of sale or the appointment of a receiver upon default of the security provider. In the event of default, the security provider would be able to enforce the security by exercising the power of sale over the fixed assets, or by appointing a receiver to take possession of the property and realise same towards liquidation of the debts, or by taking over management of the business of the security provider as a going concern.

Further, when employing securities as collateral in Nigeria, since they are dematerialised, counterparties transmit an executed memorandum in respect of securities cached in a CSD to the depository requesting that a 'lien' be placed on the relevant quantum of securities held with the depository.[136] In addition, an undated letter signed by the security provider, authorising the security taker to sell the securities in the event of default will have to be provided to the security taker, as the depository would require this document should the security taker wish to realise the security. Since the type of the security created this way is a (floating) charge, there remains a requirement to register the interest at the CAC.[137]

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[132] Section 222(1) of the CAMA 2020 provides: " … every charge created by a company, being a charge to which this section applies, shall so far as any security on the company's property or undertaking is conferred, be void against the liquidator and any creditor of the company, unless the prescribed particulars of the charge together with the instrument, if any, by which the charge is created or evidenced, have been or are delivered to or received by the Commission for registration in the manner required by this Act or by any enactment repealed by this Act within 90 days after the date of its creation, but without prejudice to any contract or obligation for repayment of the money thereby secured, and when a charge becomes void under this section, the money thereby secured shall immediately become payable and registration under this section shall give rise to constructive notice of the matters stated in the particulars of charge."

[133] According to section 222(2) of the CAMA 2020, the following types of security are registrable: a charge for the purpose of securing any issue of debentures, a charge on uncalled share capital of the company, a charge created or evidenced by an instrument which if executed by an individual would require registration as a bill of sale, a charge on land, wherever situate, or any interest therein, but not including a charge for rent or other periodical sum issuing out of land, a charge on the book debts of the company, a floating charge on the undertaking or property of the company, a charge on calls made but not paid, a charge on a ship or aircraft or any share in a ship, and a charge on goodwill, on a patent or a licence under a patent, on trademark or on copyright or a licence under a copyright.

[134] Section 31 of the *Civil Aviation Act 2006*.

[135] Section 16 of the *Merchant Shipping Act 2007*.

[136] Where the securities are not dematerialised form, the appropriate way to leverage them as collateral would be to take a legal mortgage over them and have the security taker's name entered into the register of members or register of debenture holders.

[137] Ibid (n 153).

A side-by-side comparison of the collateral regime under Nigerian law to the EU regime set out above shows how ill-suited the former is when it comes to supporting derivatives trading. In other words, the collateral and security regime in Nigeria is from an era which preceded the proliferation of derivatives and is therefore suited to traditional bank lending, not a modern derivatives market where financial collateral would typically be debt securities or even cash. Derivative transactions are instantaneous and the collateral taking framework in Nigeria obviously cannot work within the present prism: the requirement to formally register collateral at the CAC presents the challenge of transactional efficacy. In practical terms, this means that in the event of a counterparty's default, a security taker will be unable to realise its collateral in a timely fashion. In addition, looking at the process of charging book entry securities described above, there are obviously issues of practicality if documents have to be transmitted to a central securities depository or custodian whenever book entry security is employed as collateral. There is therefore a disconnect between the extant security regime and the rules which ought to apply to title transfer arrangements.[138] These fail the Braithwaite-Murphy Test conceptualised above.

In sharp contrast, the approach which the *EU Directive on Financial Collateral Arrangements* adopts is to specify that the only perfection requirement imposable in respect of financial collateral should be that the financial collateral is delivered, transferred, held, registered or otherwise designated so as to be in the possession or under the control of the collateral taker or of a person acting on the collateral taker's behalf while not excluding collateral techniques where the collateral provider is allowed to substitute collateral. Also, the directive ensures that collateral can be realised by doing away with requirements which could lead to delays such as having to give prior notice of intention to realise security and sale of security by public auction.[139] Therefore, financial collateral arrangements which effectuate title transfer need to be explicitly created and then carved out from the obligation to register charges under Nigerian company law.

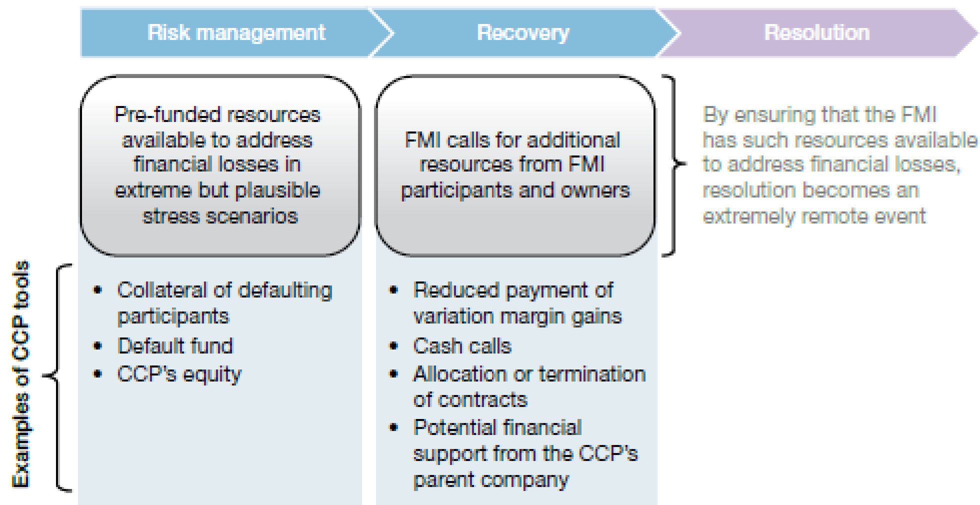
3.4.6. CCP Recovery and Resolution Regime

We turn, finally, to the CCP recovery and resolution regime in Nigeria. Principle 3 of the CPSS-IOSCO Principles guides that "[a CCP] should identify scenarios that may potentially prevent it from being able to provide its critical operations and services as a going concern and assess the effectiveness of a full range of options for recovery or orderly wind-down. [A CCP] should prepare appropriate plans for its recovery or orderly wind-down based on the results of that assessment. Where applicable, [a CCP] should also provide relevant authorities with the information needed for

[138] Louise Gullifer, 'What Should We Do About Financial Collateral?' [2012] 65 Current Legal Problems 377–410.
[139] Articles 3 – 8 of Directive 2002/47/EC.

purposes of resolution planning". Such a regime would ensure that a regulatory system would have the necessary tools to continue offering the critical services it would normally provide, in addition to preventing systemic disruption to the financial system in the event of a CCP failure.[140]

Figure 3.9.: Tools available to help a CCP manage risk



Source: Elizabeth Woodman, Lucia Chung, and Nikil Chande, 'Establishing a Resolution Regime for Canada's Financial Market Infrastructures' [2018] Bank of Canada Financial System Review <https://www.bankofcanada.ca/wp-content/uploads/2018/06/fsr-june18-woodman.pdf> accessed 18 March 2020 28.

Attempting to build the resolution component into the regulatory framework, rule 31, part b, of the *SEC Derivatives and CCP Rules* provide:

> "1. A CCP shall have processes and procedures to achieve adequate recovery when its going concern status is threatened so that its critical operations and services can be sustained.
> 2. The processes and procedures shall clearly spell out pre-agreed obligations of Clearing Members and the CCP itself in the event of recovery which should be reviewed annually and disclosed to the Commission.
> 3. Where recovery is no longer feasible, the processes and procedures shall provide for orderly winding down to avoid causing distress to the system.
> 4. The processes and procedures shall make arrangement for transferring critical operations of the CCP to another CCP where available.
> 5. The Commission shall ensure seamless transfer of operations of a defaulting CCP to another CCP where available."

As explained extensively in chapter 2, CCPs are important market infrastructures; as such, recovery and resolution provisions applicable to them in times of stress is vital.[141] Therefore, the question which follows concerns whether the *SEC Derivatives and CCP Rules* successfully align the

[140] Elizabeth Woodman, Lucia Chung, and Nikil Chande, 'Establishing a Resolution Regime for Canada's Financial Market Infrastructures' [2018] Bank of Canada Financial System Review <https://www.bankofcanada.ca/wp-content/uploads/2018/06/fsr-june18-woodman.pdf> accessed 18 March 2020 25.

[141] In chapter 2, it was noted that CCPs could become insolvent for any number of reasons ranging from operational risks to mandatory clearing to moral hazard to adverse selection to unforeseen risks or even interconnectedness to other large market infrastructure institutions and even a liquidity crisis.

Nigerian framework with global standards in this respect. Against the backdrop of Principle 3 of the CPSS-IOSCO Principles, this dissertation submits in the negative. *Why*? The *SEC Derivatives and CCP Rules* simply do not do enough to robustly address systemic externalities which CCPs face in the Nigerian financial system, and given their increasing interconnectedness to the banking system, this is extremely dangerous in a stress scenario.

The OECD has highlighted that "CCP clearing reduces counterparty risk, but it also concentrates credit risk and magnifies the systemic risks related to the failure of the CCP."[142] In a stress scenario, therefore, the obligation that a CCP shall have "processes and procedures [providing] for orderly winding down to avoid causing distress to the system" is vague, while the expectation that "critical operations of the CCP are transferred to another CCP where available" ignores the reality that there is as of yet just one fully operational clearing entity in the country. Given these, this dissertation submits that, currently, this is a regulatory blind spot and finds that the CCP recovery and resolution regime in Nigeria are wholly inadequate.[143]

With the emerging linkage between FMDQ Clear Limited (being the major clearing entity in the Nigerian financial market) and the banking system, were the former to run into difficulty, there could be an impact on the broader financial market, and the fact that the *SEC Derivatives and CCP Rules* do not contemplate a role for the CBN in such a case is a glaring flaw. We know that endogenous interactions between CCPs and banking systems can lead to unsettling feedback loops in times of stress and we also know that in such circumstances "the risks of banks and CCPs should be considered jointly, rather than in isolation".[144] In the absence of a robust specialised resolution framework where a CCP fails, a financial system will be confronted with either (1) winding up the CCP under basic corporate insolvency law or (2) a public bailout. The first disincentivises CCPs from properly managing their risks (i.e., moral hazard) while the latter can be costly and is increasingly frowned upon.[145] It is therefore submitted that the CBN ought to have an integral role in the licencing and regulation of clearing entities, a circumstance which would call into question

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[142] OECD, Regulatory Reform of OTC Derivatives and Its Implications for Sovereign Debt Management Practices: Report by the OECD Ad Hoc Expert Group on OTC Derivatives - Regulations and Implications for Sovereign Debt Management Practices [2011] OECD Working Papers on Sovereign Borrowing and Public Debt Management, No 1, OECD Publishing <http://www.oecd.org/finance/public-debt/49931920.pdf> accessed 18 March 2020 25.

[143] See, in contrast, *Proposal for a regulation of the European Parliament and of the Council on a framework for the recovery and resolution of central counterparties and amending Regulations* (EU) No 1095/2010, (EU) No 648/2012, and (EU) 2015/2365 (COM(2016)0856 – C8-0484/2016 – 2016/0365(COD)) <https://data.consilium.europa.eu/doc/document/ST-10341-2020-INIT/en/pdf>. This is explored in more detail in chapter 5.

[144] Umar Faruqui, Wenqian Huang, and Előd Takáts, 'Clearing Risks in OTC Derivatives Markets: The CCP Bank Nexus' [2018] BIS Quarterly Review <https://www.bis.org/publ/qtrpdf/r_qt1812h.pdf> accessed 8 March 2021 74.

[145] See chapter 1 at 2.9.

the appropriateness of the functional design structure of the Nigerian financial regulatory framework. What is more, it has been highlighted that "due to its systemic importance, a CCP should be subject to the oversight of a systemic risk overseer that has the authority to allow access to emergency liquidity, which in most countries is the central bank".[146] The capacity of the SEC to regulate these entities, without substantial interface or linkage with the banking regulator, is questionable.[147] These issues are explored in more detail (against the comparator jurisdictions) in chapter 5.

3.4.7. Reiteration of Gaps as it Relates to Appurtenant Infrastructure

To reiterate, because of the importance of clearing entities in the emerging global financial market order, the finality, irrevocability, and supremacy of their rules to general insolvency rules cannot be open to question. This dissertation finds that under Nigerian law, currently, this is not the case. In the event of a member's default, a clearing entity must be able to transfer outstanding transactions to other members or close out the transactions and calculate net sums due, without the prospect of a liquidator interfering—thereby raising questions as to legal certainty in the derivatives market. Specifically, in relation to the OTC FX futures which is admitted on FMDQ exchange, the researcher is aware that an important feedback from market participants (particularly foreign portfolio and foreign direct investors) revolves around the fidelity of the provisions outlined in the *OTC FX Futures Market Operational Standards*, which sets out in section 6.3 elaborate provisions which would in theory be activated in the event of a default of a deposit money bank.[148] Even though it is represented to the Nigerian derivatives markets that the *OTC FX Futures Market Operational Standards* is endorsed by the CBN, market participants remain uncertain that in the event of a default, their netting agreements would be honoured. The nature or form of the referenced 'endorsement' is not clear, neither is it predicated on any statutory or regulatory instrument.

The practical consequence of these findings dovetails into the point that was made in chapter 2 about the difference between a CCP and a clearing house:[149] a CCP will (or can) interpose itself between counterparties whereas a clearing house cannot. This dissertation submits that a CCP in Nigeria can only credibly purport to interpose itself before an insolvency; beyond that, it cannot. So, even though the *SEC Derivatives and CCP Rules* define a CCP as "an entity registered by the Commission that interposes itself between counterparties to a securities transaction traded on one

[146] IMF, Making Over-the-Counter Derivatives Safer: The Role of Central Counterparties [2010] Global Financial Stability Report.
[147] In the UK, the BOE regulates CCPs. The relevance of this point (in contrast to the structure which exists in Nigeria currently) is discussed extensively in chapter 5.
[148] Available at: <https://www.fmdqgroup.com/wp-content/uploads/2018/08/OTC-FX-Futures-Market-Operational-Standards-August-16-2018.pdf>.
[149] See chapter 2 at 2.8.1.

or more financial markets, becoming the buyer to every seller and seller to every buyer", this research finds that such an interposition will only work, safeguarding the rights and obligations of the original members, to the extent that neither enters into an insolvency after the clearing entity has interposed. Were one to enter insolvency after the CCP's interposition, given the issues set out in the present chapter, it is not at all the case that the derivative transaction (and by extension any netting agreement) would not be interfered with. Therefore, it is submitted, with respect, that the *SEC Derivatives and CCP Rules* issued by the SEC are not only functionally defective, but what is currently being referred to in Nigeria as CCPs are indeed only clearing houses.

3.5. Prevailing Synthesis: Theoretical and Practical Conclusions

Having disentangled the Nigerian regulatory framework as it relates to derivatives, drilling down from the broader legal system to the financial regulatory system, and then the derivatives framework itself, it is logical to then test relevant findings against technical framework outlined in chapter 2 and document some key theoretical and practical conclusions.

3.5.1. Some Theoretical Conclusions

The first question which might come to mind is: *what theoretical view(s), if any, underpin(s) the derivatives regulatory framework in Nigeria*? Elements of the traditional and global justifications for regulating financial markets are readily discernible from the exploration of the broader regulatory framework (of which the derivatives segment is a part) in Nigeria.[150] However, they have been applied over time with limited systematic design and rigour. So, while one can manage to glean regulatory objectives targeted at protecting market participants (from the retail segment to the wholesale segment),[151] mitigating financial market risks,[152] and, of course, engendering

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[150] Folarin Akinbami and Franklin Ngwu, 'Overhauling the Institutional Structure of Financial Regulation in Nigeria: The Unfinished Reform' [2016] 17(4) Journal of Banking Regulation 311-331.

[151] Investor protection is a theme which is very pronounced in Nigerian financial regulation. For example, in the CBN issued the Consumer Protection Framework, which guides the regulation of consumer protection practices of financial institutions under the regulatory purview of the CBN to ensure that consumers of financial services and sets out nine key guiding principles under which these entities are to operate. The SEC too prioritises this, with the regulator issuing rules on this from time to time and sections 197 – 221 of the ISA 2007 even mandating that securities exchanges and trading platforms establish investor protection funds "to compensate investors who suffer pecuniary loss (a) the insolvency, bankruptcy or negligence of a dealing member firm of a securities exchange or capital trade point; and (b) defalcation committed by a dealing member firm or any of its directors, officers, employees or representatives in relation to securities, money or any property entrusted to, or received or deemed received by the dealing member firm in the course of its business as a capital market operator".

[152] See generally Isa Audu, 'Risk Management in Financial Service Industry' [2014] Central Bank of Nigeria Understanding Monetary Policy Series No 40 <https://www.cbn.gov.ng/out/2016/mpd/understanding%20monetary%20policy%20series%20no%2040.pdf> accessed 21 February 2020.

financial market—and even economic—development in the Nigerian financial system, this dissertation submits, however, that the intellectual assumptions which underpin Nigeria's approach to the regulation of derivatives (and indeed the broader financial compact) have been anaemic, conflicting, and therefore ill-suited to help advance economic growth, to the extent that a vibrant derivatives market can help do so. The Nigerian financial and derivatives markets are advancing despite the regulatory design not because of it.

Even though the traditional public interest and private interest are useful analytical frameworks to proceed in analysing the theoretical underpinnings of the Nigerian derivatives market, they do not provide a robust enough framework to explain the haphazard make-up of the regulatory maze which currently constitutes Nigerian derivatives regulation and law.[153] To be sure, engendering financial market development is the appropriate theoretical premise from which derivatives regulation (and indeed the broader financial regulation construct) in Nigeria should be theoretically assessed.[154] This is because financial regulation in the country has been driven by an interventionist imperative to use regulation and regulatory actors as instrumentalities to achieve what policy makers consider to be 'public good'.[155]

The specifics of what that public good ought to be though is what remains very much open to debate, given how reportedly corrupt Nigerian government institutions and regulatory actors are.[156] Added to this, Nigerian regulatory actors are not at all bashful of exerting their regulatory prerogative in a dramatic manner.[157] In particular, the CBN, SEC, PenCom, and NAICOM are especially prolific regulators, issuing market-changing regulations regularly. For example, in July 2019, the CBN issued a circular which mandated that all deposit money banks in the country were required to maintain a minimum LDR of 60%, with small and medium enterprises, retail, mortgage, and consumer lending being assigned a weight of 150% for the purpose of computing LDR.[158] The stated justification for the dramatic increase was to "ramp up growth of the Nigerian economy through investment in the real sector",[159] a very interventionist preoccupation and one which some have long argued is outside the core mandate of a reserve bank.[160] Similarly, in October 2019, the

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[153] These theoretical themes are explored in chapter 4.
[154] See chapter 4 at 4.5.
[155] See chapter 4 at 4.5. for discussion on 'public good'.
[156] In the Transparency International Corruption Index 2019, Nigeria is ranked 146/180 countries. See: <https://www.transparency.org/country/NGA>.
[157] Some might say that they are more disruptive than dramatic.
[158] See "CBN Circular – Regulatory Measures To Improve Lending to the real Sector of the Nigerian Economy", available at: <https://www.cbn.gov.ng/Out/2019/CCD/Lending%20to%20Real%20Sector.pdf>.
[159] Ibid.
[160] Oyinye Nwachukwu, 'CBN and the Real Sector Question' *BusinessDay* (30 June 2013) <https://businessday.ng/features/article/cbn-and-the-real-sector-question/> accessed 26 February 2020 ("The direct involvement of the Central Bank of Nigeria (CBN) in the real sector activities is a very controversial issue and different opinions exist about it. For instance, John Lithwack, World Bank lead economist thinks

CBN issued a circular to all banks which provided that effective October 23, 2019, individuals and local corporates (a categorisation which includes pension fund administrators) were specifically excluded from investing in open market operations bills issued by the CBN on behalf of the federal government at both primary auctions and secondary markets (the "**OMO circular**").[161] Before that, retail investors and pension fund administrators had been able to invest in open market operations bills in addition to treasury bills, with both instruments being effectively fungible. The CBN contended that the dramatic policy shift was being effected to incentivise "people with huge … funds idle in treasury bills" to invest said funds in the real sector so that it "[creates] more jobs in the country".[162] Unfortunately, in both cases, none of the stated regulatory objectives resulted from the policies implemented. They only ended up unsettling the financial markets.[163]

Still, this dissertation takes the view that interventionism aimed at engendering financial market development is the correct approach because an optimally structured financial system can[164] bring about significant advantages such as reduced transaction costs, fairer markets, proliferation of innovative financial products, and more effective means of fostering and deploying capital towards real sector development; however, the question which follows, of course, concerns whether regulatory actors in the Nigerian financial system are successfully achieving these outcomes. To that question, this dissertation submits in the negative. To illustrate, with direct reference to the two CBN policies mentioned above, a conflict exists, for example, between the stated objective of the CBN and the steps being taken by the regulator in relation to general liquidity management in the country. On the one hand, the CBN wants deposit money banks to lend more into the real sector; on the other hand, from the perspective of pension fund administrators and non-bank financial institutions, the practical effect of the above-referenced circulars is that they have, together, created a framework by which only banks are able to lend to the CBN *via* open market operations bills—even though the stated policy was to trigger banks to lend to the real sector. Further, in relation to the CBN's policy terms of cash reserve ratio which, as at the time of writing, stands at 27.5%[165] and the above-mentioned LDR, there appears to be some contradiction between both as it would be difficult for banks to grow their risk assets without corresponding risk to their portfolios. Finally, in a country that is entirely export-dependent for its foreign currency receipts, the OMO circular

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that it is not the core function of a [central bank] to have these additional programmes for say, the [small and medium scale enterprises], [a]griculture etc, for stimulating economic activity.")

[161] See "CBN Circular – Open Market Operations Auctions", available at: <http://acapng.com/wp-content/uploads/2020/01/Letter-to-All-Banks_Open-Market-Operations.pdf>.

[162] Nike Popoola, 'CBN Stops Treasury Bills' Sale to Individuals' *Punch* (7 November 2019) <https://punchng.com/cbn-stops-treasury-bills-sale-to-individuals/> accessed 26 February 2020.

[163] Ibid.

[164] It is also possible for interventionist policies to lead to utter disaster.

[165] Details of cash reserve ratio as of February 2020 available at: <https://www.cbn.gov.ng/MonetaryPolicy/decisions.asp>.

could be interpreted as sending a signal that there is some regulatory nervousness in the financial markets, especially as it concerns foreign exchange.

Lastly, there is evidence of regulatory capture underscored by the private ordering of the overarching framework from the analysis conducted by the present work. Nothing typifies this more than the fact that recent statutory reform on derivatives in Nigeria have been limited to just addressing challenges associated with the bilateral, wholesale segment. Larger concerns related to the broader system-wide compact found in the course of this research were inexplicably ignored. This is exactly what happens when "a core group of market participants not only writes the rules of the game but is also responsible for interpreting and enforcing them."[166] Derivatives reform in Nigeria has been constructed as it has because market and economic actors who stand to capture most of the benefits accruable were involved in its generation. This theme is explored fulsomely in chapter 4.

3.5.2. Some Practical Conclusions

Against the global frame of reference explored in chapter 2, we find that the broader financial compact in which the Nigerian derivatives market is situated is not dissimilar to those which exist globally from a product,[167] product users,[168] and infrastructure perspective. There is however a notable blurring between the OTC and ETD segments observable in Nigeria, and some important conclusions can be drawn from these. To illustrate, the FMDQ trading venue which was initially registered by the SEC as an 'OTC market' conceived to create a market platform for wholesale market participants in 2012 began listing publicly traded bonds in 2014.[169] The vertical configuration of the FMDQ Group[170]—coupled with the introduction of a private market[171] (modelled after the NASDAQ private market)[172] which further clouds the erstwhile delineation between OTC participants such as institutional investors and the retail segment—underscores this blurring. The NGX Group too, which had hitherto generally admitted securities available to the retail investing segment, in 2017 exposed draft commercial paper quotation rules, an asset class

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[166] Dan Awrey, 'The Limits of Private Ordering Within Modern Financial Markets' [2014] 34 Review of Banking and Financial Law 183.
[167] The derivative products which exist globally exist in Nigeria albeit with varying sophistication.
[168] See chapter 2 at 2.5.
[169] See FMDQ *Bond Listing and Quotation Rules 2014*, available at: <https://www.fmdqgroup.com/wp-content/uploads/2017/07/FMDQ-Bond-Listing-and-Quotation-Rules-Dec.-2014.pdf>.
[170] The researcher is aware that the FMDQ group obtained the approval of the SEC in December 2019 for its Equity Market Rules, which means that it would soon be admitting equity securities onto its platform.
[171] Private markets match sellers of private company securities with buyers. Sellers and buyers typically post bids and asks on these markets and easily find each other without many of the legal and trust issues that attach in public markets.
[172] See generally: <https://www.nasdaq.com/solutions/private-company-solutions>.

traded by wholesale market participants in the OTC space.[173] These changes demonstrate that these infrastructures, propelled by innovation and technology, and their markets are functionally integrating. Even though the impact of this remains yet unclear, this is a new reality that financial market regulators in Nigeria must be mindful of. This dissertation submits that the current framing of the ISA 2007 does not provide sufficient statutory basis to deal with the dynamics of this blurring, especially as derivatives become more and more important in the Nigerian financial system.

Turning to infrastructures, then, there is a notable increase in the number of exchanges and clearing houses in the country, with increased focus now being channelled towards development of the derivatives markets. At the beginning of 2010, there was only one exchange in Nigeria (the exchange within the NGX Group); by the end of 2019, however, there were six exchanges,[174] with all working intensely to develop their separate derivatives markets. Two, FMDQ and NGX, are at the forefront of advancing the clearing end of the value-chain as well, having promoted their separate clearing entities. So, undoubtedly, there is increased derivatives activity.

While increased activity is a good thing,[175] the proliferation of venues and infrastructures triggers concerns about fragmentation. This is already of burning concern at global regulatory level, so its manifestation at domestic level in a major developing market such as Nigeria certainly deserves deliberate attention. Because of the relatively small size of the Nigerian capital market, this study would argue that the proliferation of market infrastructures in Nigeria is not necessarily a welcome development; more infrastructures do not necessarily connote advancement. Most of the forms in which fragmentation presents itself (discrepancies, overlaps, desynchronisation, and competition), as explained in this dissertation,[176] are dangerous for a market from a regulatory standpoint.[177] Arguably, only 'competition' presents opportunities,[178] as this drives efficiency, provides options to

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[173] See "NSE *Proposed Rules for Listing of Commercial Papers on the Nigerian Stock Exchange*", available at: <http://www.nse.com.ng/regulation-site/IssuersRules/Proposed%20Rules%20for%20Listing%20of%20Commercial%20Papers%20on%20the%20Nigerian%20Stock%20Exchange%20-%20November%202017.pdf>.

[174] Dipo Olowookere, 'Association of Securities Exchange of Nigeria Launches Tomorrow' *Business Post* (7 August 2018) <https://businesspost.ng/economy/association-of-securities-exchange-of-nigeria-launches-tomorrow/> accessed 10 January 2020.

[175] Increased activity means increased trading velocity and liquidity.

[176] Ibid.

[177] Stijn Claessens, 'Fragmentation in Global Financial Markets: Good or Bad for Financial Stability?' [2019] BIS Working Papers No 815 <https://www.bis.org/publ/work815.pdf> accessed 10 January 2020.

[178] OECD, *Competition and Financial Markets: Key Findings* (2009) <https://www.oecd.org/daf/competition/43067294.pdf> accessed 10 January 2020.

market participants, and contributes to reduced transaction costs.[179] 'Discrepancies', 'overlaps', 'desynchronisation', conversely, present real challenges.

Firstly, unhealthy competition—a race to the bottom[180]—is foreseeable, and indeed is already occurring, between infrastructure providers given that they are incentivised by the need to grow profits and expand their relevant market shares;[181] therefore, stifling the prospect of cooperation which is required for effective regulation of exchange and clearing house member firms across multiple venues. *Secondly*, infrastructure providers have different rules and standards, and, given that the members are often made up of the same entities, having to discharge different sets of obligations (observing different transaction standards and making use of different data reporting templates) raising questions of practical efficiency and duplication. Differences in regulatory obligations across multiplicity of infrastructures will have an impact on costs[182] and barriers.[183] *Thirdly*, fragmented markets across disparate infrastructures will affect negatively the ability to achieve deeper markets.[184] *Fourthly*, and importantly, this would impair the regulatory visibility of the SEC across all its regulated entities, given that reports are filed to the regulator from multiple channels. *Lastly*, the advantages associated with clearing, explored in chapter 2, (particularly as it relates to the neutering of counterparty risk and, correlatively, systemic risk) are more difficult to capture when clearing infrastructures are fragmented.[185]

The next important practical finding identified in this study as it relates to the derivatives market and attendant regulatory framework is the haphazard nature of the local regulatory architecture. The broader financial regulatory patchwork of rules and regulations have not been constructed with the scrupulous calculatedness expected of an emerging economy trying to engender deeper and

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[179] Chinwendu Obienyi, 'FMDQ Entry Will Bring Healthy Competition in Capital Market' *Sunnewsonline* (12 November 2019) <https://www.sunnewsonline.com/fmdq-entryll-bring-healthy-competition-in-capital-market-uduk/> accessed 10 January 2020.

[180] Siyi Zhu, 'Is there a "Race to the Bottom" in Central Counterparties Competition?' [2011] DNB Occasional Studies Vol 9/No 6 <https://www.dnb.nl/binaries/DNB_OS_0906_WEB_tcm46-266141.pdf> accessed 17 January 2020 12 ("In light of CCPs' systemic importance, concerns have been raised among regulators and overseers about the effect of the competitive behaviours on the resilience of CCPs.")

[181] See, for example, Feyisayo Popoola, 'FMDQ Not in Competition with NSE, MD Says' *Punch* 22 (August 2019) <https://punchng.com/fmdq-not-in-competition-with-nse-md-says/> and Bamidele Famoofo, 'FMDQ Securities Exchange Breaks NSE's Monopoly' *Thisday* (11 August 2019) <https://www.thisdaylive.com/index.php/2019/08/11/fmdq-securities-exchange-breaks-nses-monopoly/> both accessed 10 January 2020.

[182] For example, member firms have to pay membership fees in multiple exchanges while also contributing to the default funds in multiple clearing entities across various asset classes.

[183] Paul Glasserman, Ciamac Moallemi, Kai Yuan, 'Hidden Illiquidity with Multiple Central Counterparties' [2016] Operations Research 64(5) 1143–1158.

[184] Claessens (n 197) at 11 ("Concentrated securities markets can provide great depth …").

[185] Darrell DuYe and Haoxiang Zhu, 'Does a Central Clearing Counterparty Reduce Counterparty Risk' [2009] Stanford University Working Paper <https://web.stanford.edu/~duffie/DuffieZhuFeb18.pdf> accessed 16 December 2018.

more liquid markets. The definitional confusion highlighted above is a case in point.[186] Another issue is the regulatory gap found in this study as it relates to CCPs in Nigeria despite recent reform. Clearing entities ought to be protected against the operation of insolvency law so that they can assure that transactions which are submitted to their systems are irrevocable, to dispense with the prospect of legal challenge to the finality of settlement, and to ensure the enforceability of collateral. The fact that functional regulatory and jurisdictional conflict continues to exist between the principal regulators in the derivatives market, with the CBN exerting regulatory ability over foreign exchange and foreign exchange derivatives entered into by banks while the SEC simultaneously exercises purview over derivatives in general, given that they are defined as "securities",[187] is, at best, confusing and entrenches legal uncertainty. At worst, it duplicates regulatory obligations, increasing transaction costs, and heightens barriers.

Added to this, from all indications, there appears to be limited practical regulatory synchrony and coordination between the CBN and SEC in the issuance of rules and regulations to their regulated entities. For example, even though the OTC FX futures traded on the FMDQ platform predate the issuance of the *SEC Derivatives and CCP Rules*, there was no attempt to address the existence of the product in SEC's rules. Therefore, even though rule 3(1) of the *SEC Derivatives and CCP Rules* prescribes that "the Commission's approval shall be sought and obtained prior to the introduction of any contract", there is no clarity as to whether these contracts ought to be registered with the SEC. And even if one were to argue that the rules are silent on this, since foreign exchange falls within the regulatory domain of the CBN, a carve out should have been explicitly articulated. Finally, legal uncertainty remains the regulatory elephant in the room. Given that there is no legislation dealing specifically with the operations of clearing houses if a counterparty default occurs, market participants remain unclear as to the efficacy of netting post-insolvency, the enforceability of the default rules of the clearing house (which would typically provide for the settlement of outstanding contracts on a net basis), the effectiveness of "market charges" granted to secure obligations incurred in connection with derivative contracts, and that margin held by a clearing entity and contributions made by its members towards its default fund can be applied against a defaulting member's obligations notwithstanding any third party interests.

3.6. Conclusion

This chapter has discussed the extant state of the Nigerian derivatives market, providing insight into the relevant market segments, derivative products transacted in Nigeria, and unearthed

[186] See above at 3.2.1.
[187] Section 315 of the ISA 2007.

important data as to market size, players, and regulators, among others. Crucially, the substantive regulatory defects and gaps in the subject jurisdiction have also been systemised into a coherent analytical framework, focusing on: (a) law and regulation and (b) appurtenant infrastructure. This chapter has set out a definite representative view of the extant derivatives regulatory framework.

More importantly, though, this chapter has shown that while it had long been apparent to market participants, intermediaries, transaction advisers, and regulatory actors that there might have been some structural defects in the Nigerian derivatives regulatory framework, only elements were clear, and the exact contours were unappreciated. For example, the financial markets had focused only on the absence of standalone bilateral netting legislation, as though addressing that gap alone would cure all the other defects which this research has identified. What this misapprehension has revealed is that the extent of the gaps existent in the Nigerian derivatives regulatory framework had not been sufficiently scoped and understood.

Chapter 4 — The Flow and Flaws of Recent Reform

4.1. Introduction

With the previous chapter having set out a representative view of the extant derivatives regulatory framework, this chapter focuses on the flow and flaws of recent reform into Nigerian law. In doing so, it employs 'transplantation' and 'transnationalisation', the two vehicles which have served to transport reform into the Nigerian derivatives regulatory framework (i.e. the enactment of the CAMA 2020 and the changes it introduces) as exploratory tools. The chapter argues that the intended effect of recent reform—which was curing the legal and regulatory defects in the local derivatives regulatory framework[1]—will not be achieved because contextual and substantive attention was not paid to the ontology of the local legal system before the borrowing.[2]

This chapter explores these two concepts, discussing their normative connection, and then maps the transnational flow of derivatives reform into Nigerian law. These two concepts help us understand the flow and flaws of reform into Nigerian law: *how it happened* and *what went wrong*. It then explores relevant foundational theories of financial regulation, upon which it constructs a theoretical argument as to what informed reform in Nigeria before going on to deconstruct the failures which affected the flow of reform into Nigerian law.

4.2. Transplantation

From the discussions outlined in chapter 3, it is clear that the recent derivatives reform enacted in Nigeria is *borrowed*, meaning this content has emanated from outside the jurisdiction,[3] giving rise to a process known as 'legal transplanting'.[4] Legal transplanting is the incorporation of regulations, doctrines, or institutions from one legal system into another.[5] In practical terms, it involves enacting and operationalising legal principles in jurisdictions other than where the principles emanate.[6]

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[1] See Chapter 3.

[2] Silvia Ferreri and Larry DiMatteo, 'Terminology Matters: Dangers of Superficial Transplantation' [2019] 37(1) Boston University International Law Journal 36-87. ("[I]gnorance of context and substance dooms the transplantation or borrowing to failure in situations where the context of the adopting country is substantially different than the country of borrowing.")

[3] John Merryman, 'Comparative Law and Social Change: On the Origins, Style, Decline and Revival of the Law and Development Movement' [1977] 25(3) The American Journal of Comparative Law 457-491.

[4] See generally Alan Watson, 'The Birth of Legal Transplants' [2013] Georgia Journal of International and Comparative Law 41(3) 605-608.

[5] George Mousourakis, 'Legal Transplants and Legal Development: A Jurisprudential and Comparative Law Approach' [2013] Acta Juridica Hungarica 54(3) 219-236.

[6] Alan Watson, *Legal Transplants: An Approach to Comparative Law* (2nd edn, University of Georgia Press 1993) 21.

This concept is by no means a recent phenomenon and has been used as a mechanism to develop legal *corpus* in foreign territories for a long time.[7] The Barbados Slave Act of 1661 was the basis of the development of slave law in Jamaica in 1664, in South Carolina in 1696, and in Antigua in 1702.[8] (It is, of course, possible for transplantation to be malicious.)[9] In more modern times, legal transplanting has been used to help develop legal rules and institutions in Eastern European countries previously under the administration of the Soviet Union when these countries were looking to construct more market-based economies modelled after Western Europe and the US after the cold war.[10]

4.2.1. Comments on Legal Transplanting

At this point, there are important theoretical arguments connected to legal transplanting which must be considered. One of the most prominent criticisms of legal transplantation was made by Pierre Legrand in his seminal work *The Impossibility of Legal Transplants*.[11] Basically, three broad criticisms were levelled. First, it was contended that legal rules are inseparable from cultural and social contexts. Next, it was argued that legal rules designed to serve the needs of one country will not necessarily be useful for another country. Thirdly, it was argued that legal rules change once they are transplanted. Within the context of this work and the subject jurisdiction, these arguments do need to be addressed since it is incontrovertible that transplantation is the principal vehicle which served to transport derivatives reform into Nigerian law.

This dissertation shall address these criticisms in turn and then take a position. *Are legal rules inseparable from cultural and social contexts*? The larger basis for this argument is that "[a] rule is necessarily an incorporative cultural form. As an accretion of cultural elements, it is supported by impressive historical and ideological formations."[12] It is submitted that this might be fanciful thinking, as it ignores the reality of how laws come to be and the science of rule making, especially in developing economies such as Nigeria. As indicated above, history is replete with examples of laws being transplanted across jurisdictions, whether deliberately or otherwise, where before said transplantations, no social or cultural connections existed.[13] Added to this, we noted above how

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[7] Jonathan Miller, 'A Typology of Legal Transplants: Using Sociology, Legal History and Argentine Examples to Explain the Transplant Process' [2003] 51(4) The American Journal of Comparative Law 839-886.

[8] Jonathan Bush, 'Free to Enslave: The Foundations of Colonial American Slave Law' [1993] Yale Journal of Law & the Humanities 5(2) 417-470.

[9] See generally Mathias Siems, 'Malicious Legal Transplants' [2018] Legal Studies 38(1) 103-119.

[10] Gianmaria Ajani, 'By Chance and Prestige: Legal Transplants in Russia and Eastern Europe' [1995] The American Journal of Comparative Law 43(1) 93-117.

[11] Pierre Legrand, 'The Impossibility of Legal Transplants' [1997] 4(2) Maastricht Journal of European and Comparative Law 111-124.

[12] Ibid.

[13] See Miller (n 7).

legal transplanting was employed as a tool to develop legal rules and institutions in Eastern European after the cold war, an event which arose only after the US had emerged in a stronger position relative to the Soviet Union following the geopolitical conflict. This is suggestive of political and socio-economic domination which follows confrontations between great powers as opposed to any "incorporative cultural form" as posited by Legrand.[14] There is therefore no requirement for there to be ideological linkages between jurisdictions. What matters is political power, dynamics, and/or the ability (or willingness) to impose law in a jurisdiction.

As far as Nigeria is concerned, therefore, a diversity of factors[15]—such as British colonialism, long-held native African custom, incessant military interventions, and Islamic influence in Northern Nigeria—have shaped what today constitutes the Nigerian legal system and the concept of Nigerian law.[16] Law is a continuously evolving phenomenon, gaining its force from the broader socio-constitutional compact wherein it is situated, and not necessarily from any "impressive historical and ideological formations". To illustrate further, the first legislation on company law in Nigeria was the *Companies Ordinance of 1912*, which was a transplant of the UK Companies (Consolidation) Act 1908. Before the enactment of the *Companies and Allied Matters Act 2004*, which is the forerunner of the CAMA 2020, the Nigerian Law Reform Commission had conducted a study of company legislation in the UK, Canada, India, Ghana, and the Caribbean before 'drafting' the *Companies and Allied Matters Act 2004* which was itself, in reality, a transplant of the Companies Act 1985. More directly, apart from links fostered as a direct consequence of British conquest of the lands which now constitute Nigeria, there were no particular "impressive historical and ideological formations" or cultural connections between the peoples of modern day Nigeria and the notion of English company law (which became Nigerian company law) before the imposition of general English law: what was English company law was simply transplanted to Nigeria, to serve colonial administrative ends, and simply became Nigerian company law.[17] Apart from the historical links between Nigeria and the UK forged at the fire of military conquest, no ideological formation underpinned what became Nigerian company law. All that mattered was raw political and socio-economic power exercised by the British.

[14] It means more nuance is required in exploring the concept of legal transplantation.
[15] See generally Alan Watson, *Sources of Law, Legal Change, and Ambiguity* (University of Pennsylvania Press 2016).
[16] Raluca Lupu, 'Sources of Law – Judicial Precedent' [2013] 5(2) Contemporary Readings in Law and Social Justice 375–381 ("Study of formal sources of law reveals their diversity. This diversity is motivated by the multitude and variety of social relations, which require legal regulation in the long evolution of society.")
[17] This is not to argue that a recipient jurisdiction need not be structurally or culturally receptive to the law being transplanted. Far from it. Indeed, one of the reasons why the UK has been selected as a comparator jurisdiction for Nigeria in this work is because of the cultural and, of course, colonial links that exist between both countries. There are numerous examples of UK laws which were successfully transplanted in Nigeria. See Louis Del Duca and Alain Levasseur, 'Impact of Legal Culture and Legal Transplants on the Evolution of the US Legal System' [2010] The American Journal of Comparative Law 58(1) 1-29.

Given the above, this dissertation submits, therefore, that rules are very much separable from broader cultural and social context. *How so*, one might still ask. As explained above with the UK and modern-day Nigeria, rules with no connection to society A have been successfully transplanted to society B. French law was successfully transplanted into the Japanese Penal Code and Code of Criminal Procedure in 1882.[18] Admittedly, while there will often be a connection between rules and the larger social context, a rule is simply the output of the rule making process girded by threat of a statutory penalty of some variation. More relevantly, in financial regulation, in developing economies such as Nigeria, external actors such as foreign multinationals and transnational actors (like the World Bank and, relevantly to this work, ISDA) apply pressure on domestic legislative systems to adopt global models of corporate, financial, and insolvency law, often wholesale.[19] These lobbying activities often record success, following which model acts become law with no underlying 'historical and ideological formations'. This dissertation contends therefore that socio-legal theoreticians[20] who argue that the law must correspond with societal features or be an expression of social interests are, with respect, incorrect. These scholars seem to make the cultural error of confusing connection for causation.

The second argument is that legal rules designed to serve the needs of one country will not necessarily be useful for another country (a variant of the 'one size does not fit all' criticism). This appears to be more of an observation than a criticism. The reality is that with increased globalisation, internationalisation, financialisation, harmonisation, and convergence, legal transplanting, in one form or the other, continues to occur.[21] And with legal systems being anatomically connected to broader social systems, which of course vary from country to country, it follows that varying degrees of success will be recorded following acts of legal transplantation. So, by the very nature of things, one size cannot fit all, which is a core argument of this work. Failure or success following transplantation correlates to the effectiveness or artfulness of the transplantation process, not the concept of transplantation itself. Therefore, it is submitted that this criticism is fallacious and, as has been astutely noted, "transplanting does take place—however, how well it actually works and whether or not it leads to the desired results *are different questions*

[18] Alan Watson, 'Legal Transplants and Law Reform' [1976] The Law Quarterly Review 92 79-84.
[19] See generally Ayelet Berman, Sanderijn Duquet, Joost Pauwelyn, Ramses Wessel and Jan Wouters, (eds) *Informal International Lawmaking: Case Studies* (Torkel Opsahl Academic EPublisher 2012).
[20] See William Ewald, 'Comparative Jurisprudence: The Logic of Legal Transplants' [1995] The American Journal of Comparative Law 43(4) 489–510.
[21] William Twining, 'Social Science and Diffusion of Law' [2005] Journal of Law and Society 32(2) 203-240.

altogether" (*emphasis added*).[22] This notion of a 'different question altogether' is the context from which the central argument made in this chapter is advanced.

The third argument is that legal rules change once they are transplanted. Law is a dynamic, ever-changing enterprise. Notwithstanding the origins of a law transplanted into another jurisdiction, it ought to follow that legal rules should change post transplantation. Recall that it was highlighted that legal systems being anatomically connected to broader social systems will vary from country to country. Once operational, rules in jurisdiction B, which were borrowed from jurisdiction A, may react differently and generate a wholly new *corpus* and jurisprudence. For example, in the consideration of legal transplant and the common law doctrine of undue influence in Singapore, it was highlighted that Singaporean courts are very much averse to finding undue influence against a husband/father in the family business guarantee situation and this has twisted the interpretation of the doctrine from the way it is applied in English cases, the donor jurisdiction.[23] This dissertation views this dynamic as a merit, not necessarily as a demerit, provided there is no detraction from the subject jurisdiction's conception of public good.

In conclusion, drafting rules to effectuate legal reform within a jurisdiction such as Nigeria (and indeed any other) requires either of two things: one, either the draftsmen think up and then document the rules to be implemented or, two, they borrow and then document the rules to be implemented. Derivatives regulation is a very specialist subset of financial regulation. Derivatives trading, in its global and modern form, is not an activity that originated in Nigeria. Therefore, no domestic rule making prism which prioritises originality could have been applied in Nigeria because derivatives markets are vast, complex, and, most of all, global, both from a demand and supply perspective. Also, "there [is] no time to carefully craft 'organic' home-made legislation",[24] and has also had been pointed out: "[b]orrowing is much easier than thinking. It saves time and effort."[25] It is therefore vital to understand that what is being argued in this chapter is not that legal transplanting is itself bad; rather, what is being canvassed is that the borrowing which has been done to reform the local derivatives regulatory framework in Nigeria cannot achieve desired outcomes as it has not been artfully implemented.[26]

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[22] Jaakko Husa, 'Developing Legal System, Legal Transplants, and Path Dependence: Reflections on the Rule of Law' [2018] The Chinese Journal of Comparative Law 6(2) 129–150.
[23] Mindy Chen-Wishart, 'Legal Transplant and Undue Influence: Lost in Translation or a Working Misunderstanding' [2013] 62(1) International & Comparative Law Quarterly 1-30.
[24] Thomas Waelde and James Gunderson, 'Legislative Reform in Transition Economies: Western Transplants: A Short-Cut to Social Market Economy Status?' [1994] 43(2) The International and Comparative Law Quarterly 347-378.
[25] Watson (n 18).
[26] See chapter 3 at 3.3. and 3.4. outlining gaps and defects which persist in Nigerian derivatives law despite recent reform.

4.3. Transnationalisation

We turn then to transnationalisation. Global regulation in relation to derivatives has assumed a 'soft law' approach[27] whereby transnational and non-government actors from financial centres build consensus and attempt to implement this consensus,[28] as opposed to the 'hard law' approach adopted in other areas such as international trade law where either multilateral treaties or bilateral treaties are executed (such as the World Trade Organisation, for example).[29] These norms are sometimes incorporated into local law,[30] as has been done in Nigeria with derivatives reform.

Especially pressing in the context of globalisation,[31] transnational law is law which transcends the borders of modern nation-states.[32] It is crucial to note that it is not a field of law, like say land law, but, rather, a framework composed of legal doctrines and methodological architecture allowing for both a conceptual and a socio-legal engagement with law in a globalised world.[33] Transnationalisation (of law), therefore, refers to the proliferation of regulations across nation-states, so that these regulations take effect in nation-states other than where they have emanated.[34] Relevant to this dissertation[35] and rooted in "transnational private regulation"[36] or what is known as "global law without a state",[37] is the documentation and model law developed by ISDA, both of

[27] Roberta Karmel, 'IOSCO's Response to the Financial Crisis' [2012] 37 Delaware Journal of Corporate Law 850-901.
[28] Chris Brummer, *Soft Law and the Global Financial System: Rule Making in the 21st Century* (Cambridge University Press 2012).
[29] Jean Galbraith and David Zaring, 'Soft Law as Foreign Relations Law' [2014] 99(2) Cornell Law Review 735-794.
[30] Walter Mattli and Tim Büthe, 'Global Private Governance: Lessons from a National Model of Setting Standards in Accounting' [2005] 68(3/4) Law and Contemporary Problems 225-262.
[31] David Harvey, *The Conditions of Postmodernity: An Inquiry into the Origins of Cultural Change* (Cambridge, MA: Blackwell, 1989).
[32] See generally James Carter, 'Transnational Law: What Is It - How Does It Differ from International Law and Comparative Law' [2005] 23(4) Penn State International Law Review 13 and Craig Scott, ''Transnational Law' as Proto-Concept: Three Conceptions' [2009] Comparative Research in Law & Political Economy Research Paper No. 32/2009.
[33] Peer Zumbansen, 'Defining the Space of Transnational Law: Legal Theory, Global Governance & Legal Pluralism' [2012] 21(1) Transnational Law & Contemporary Problems 305-335.
[34] Roger Cotterrll, 'What is Transnational Law' [2012] 37(2) Law & Social Inquiry 500-524.
[35] See generally Gabriel Rauterberg and Andrew Verstein, 'Assessing Transnational Private Regulation of the OTC Derivatives Market: ISDA, the BBA, and the Future of Financial Reform' [2013] 54(1) Virginia Journal of International Law 9-50. ("The narrative for the OTC derivatives market has almost uniformly been described in the following manner: for the last twenty years it was a largely unregulated market, and this lack of regulation was key to the role OTC derivatives played in causally contributing to the financial crisis and subsequent market woes. In brief, OTC derivatives were deregulated, and this led to disaster — or so the story goes. This narrative, however, is incorrect and dangerously so.").
[36] Carrie Menkel-Meadow, 'Why and How to Study 'Transnational Law'' [2011] 1(1) University of California at Irvine Law Review 97-129.
[37] Peer Zumbansen and Gralf-Peter Callies, *Rough Consensus and Running Code: A Theory of Transnational Private Law* (Oxford and Portland 2010) 107.

which underpin global OTC derivatives trading and form the basis of recently enacted reforms in Nigerian derivatives regulation. [38]

A brief background on this entity. ISDA is a transnational body which seeks to advance "practices related to trading, clearing, reporting and processing of transactions in order to enhance the safety, liquidity, and transparency of global derivatives markets".[39] The standard documentation issued by this body, which has been regularly updated as the derivatives markets have developed, sets out boilerplate terms for non-economic matters (such as, default events, governing law, and jurisdiction, etc.) while leaving major economic items to the parties themselves to decide on (such as, terms on interest rate, maturity, collateral etc.).[40] ISDA committees' membership is made up of industry representatives and technical advisers. Documentation issued by ISDA "enjoys celebrity status, and … is widely cited as the paradigmatic example of a standard form contract that can be thought of as transnational law".[41] Added to this, ISDA's model netting law now forms the basis of 'netting' legislation which is being promulgated around the globe,[42] with a view to enhancing legal certainty.[43] The entity has led initiatives targeted at addressing market-wide legal and operational issues from a global perspective.[44] With global coverage,[45] the organisation publishes legal opinions for use in diverse jurisdictions, facilitates trainings for legal practitioners, market participants, and regulators, and functions as a research database. As highlighted, "[in] spearheading these initiatives, [ISDA] has leveraged the considerable expertise of its various technical committees and successfully overcome coordination and incentive (public good) issues to reduce counterparty credit, settlement and legal risks and curb opportunistic behaviour, thereby further stimulating the growth of OTC derivatives markets".[46]

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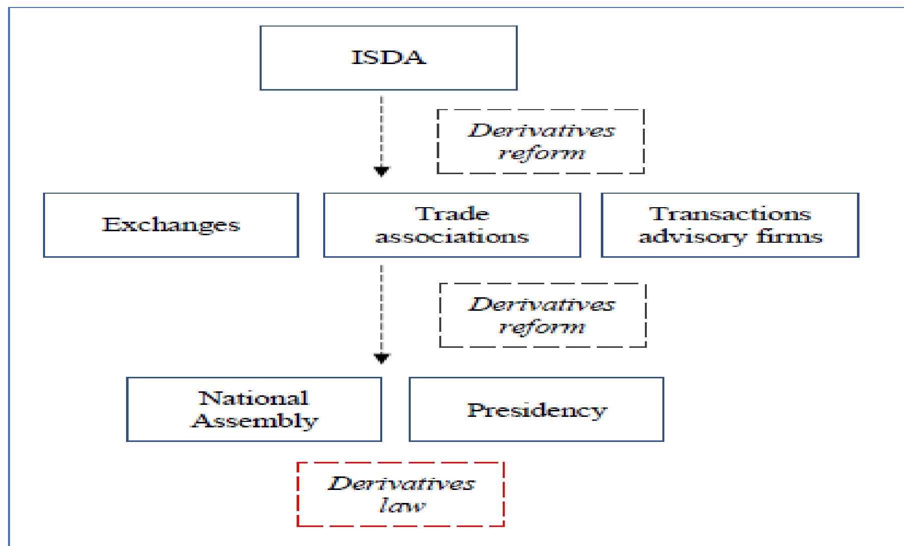
[38] Philip Jessup, *Transnational Law* (Yale University Press 1956) 2.
[39] See ISDA Mission Statement at: http://www.isda.org
[40] Parties add to or modify the terms of the ISDA Master through the use of a Schedule to the ISDA Master Agreement. The ISDA Master, along with the Schedule to the ISDA Master Agreement, if any, are umbrella documents that parties typically employ to govern their trading relationship, often covering many transactions (each of which is evidenced by a transaction confirmation) of different types. The ISDA Master Agreement and Schedule are also often supplemented by an ISDA Credit Support Annex, which is a part of the ISDA Master and governs margin collateral posting matters relating to transactions entered into under the ISDA Master and Schedule.
[41] Joanne Braithwaite, 'Standard Form Contracts as Transnational Law: Evidence from the Derivatives Markets' [2012] 75(5) The Modern Law Review 779-805.
[42] Philipp Jessup, *Transnational Law* (Yale University Press 1956) 1.
[43] See "2018 ISDA Model Netting Act and Guide", available at: <https://www.isda.org/a/X2dEE/FINAL_2018-ISDA-Model-Netting-Act-and-Guide_Oct15.pdf>.
[44] Roy Goode, 'Rule, Practice, and Pragmatism in Transnational Commercial Law' [2005] 54(3) The International and Comparative Law Quarterly 539-562.
[45] Andrew Verstein, 'Ex Tempore Contracting' [2014] 55(5) William & Mary Law Review 1869-1932.
[46] Dan Awrey, 'The Dynamics of OTC Derivatives Regulation: Bridging the Public-Private Divide' 11 European Business Organisation Law Review 155-193.

As already noted in this study, the *2006 ISDA Model Netting Act* is what was reproduced in the CAMA 2020. From discussions with market participants in the local jurisdiction, the researcher is aware that the insertion of the *2006 ISDA Model Netting Act* content into the CAMA 2020 was a culmination of advocacy and engagement implemented as between personnel from trade associations, exchange groups (particularly FMDQ and NGX), law firms from the UK, transaction advisory firms in Nigeria, and even ISDA itself. Together, these actors served as carriers of legal norms (i.e., derivatives reform) from the international arena into the local jurisdiction. [47] In Figure 4.1., which follows, this study depicts pictorially how this flow into Nigerian law occurred.

Figure: 4.1.: Transnational flow of derivatives reform into Nigerian law



Developed by researcher

4.4. Normative Connection Between Transplantation and Transnationalisation

Easy to conflate, 'transplantation' and 'transnationalisation' are different concepts, although they both exist within the construct of what is now a globalised world and regulatory arena. This sub-section explores what this means.

Transplantation is a less confusing concept: it speaks to borrowing regulations, doctrines, or institutions from one legal system and then incorporating them into another, as discussed above. So, a US court citing the 1854 English case of *Hadley v Baxendale*[48] on the foreseeability

[47] Simin Gao and Christopher Chen, 'Transnationalism and Financial Regulation Change: A Case of Derivative Markets' [2017] 18(1) European Business Organisation Law Review 193-223 ("Legal norms cannot move by themselves. They need carriers, intermediaries in transnational law-making, which are responsible for the adjustment of laws to fit national settings.")
[48] (1854) 156 Eng Rep 145 (LR Exch).

requirement in awarding of damages is a transplantation,[49] just as is the enactment and creation of Western-influenced legal rules and institutions in former countries of the Soviet Union. Transnationalisation, however, is a slightly more complex concept. As explained, it is not a "legal field *per se*, but as a framework, consisting not only of elements of legal doctrine with immediate practical relevance, but also of a methodological architecture that allows for both a conceptual and a socio-legal engagement with law in this, irreversibly and irreducibly global, context."[50] Its 'immediate practical relevance' means that it is a *living* concept, "[encompassing], on the one hand, evolutionary developments of legal doctrinal instruments and concepts, and, on the other, the creation and consolidation of complex assemblages of both law and 'regulatory governance' elements."[51]

Conceptually, it is submitted that neither notion is concerned with the nature, ontology, or appropriateness of legal norms *stricto senso*; rather, both are (more) concerned with the context of the transposition of legal norms from one legal system to the other (or as between legal systems). This is the normative link between both concepts. Transplantation is *a* mechanism by which legal norms are transposed from jurisdiction A to jurisdiction B (or system A to system B), whereas transnationalisation is the outer compact within which transplantation would occur. Put differently, legal transplantation would occur within the context of transnationalisation, which is itself an evolving and distinct concept. Transplantation is a mechanism of propagating law in a globalised environment; transnationalisation is the propagation itself. In concluding, it is vital to note that this dissertation does not agree with the view that transplantation may not necessarily promote the transnationalisation of law;[52] by virtue of the fact that legal norms being transposed will emanate from a jurisdiction other than the recipient jurisdiction, transnationalisation will be advanced by default. The relevance of these two concepts and their relationship to the Nigerian derivatives regulatory regime is that they are the two vehicles which have served to advance the importation of reform into Nigerian law.

4.5. Underpinning Theoretical Frameworks

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[49] *Solidfx LLC v Jeppesen Sanderson Inc* 841 F3d 872, 838-39 (10th Circuit 2016).
[50] Peer Zumbansen, Transnational Law: Theories & Applications (14 May 2020) (14 May 2020) TLI Think! Paper 15/2020 <https://ssrn.com/abstract=3601385 or http://dx.doi.org/10.2139/ssrn.3601385> accessed 9 November 2020.
[51] Ibid.
[52] Ido Baum, 'Legal Transplants v. Transnational Law: Lessons from the Israeli Adoption of Public Factors in Forum Non Conveniens' [2015] 40(2) Brooklyn Journal of International Law 1-50.

Before theorising as to what has informed derivatives reform in Nigeria, it is important to quickly engage with the broad fundamental theoretical arguments relevant to financial regulation.[53] The theoretical exploration of financial markets regulation generally proceeds from either of two perspectives:[54] 'market failure' versus 'state failure'. Market failure advances the notion that free competitive markets engender better economic welfare in comparison to markets which are centrally coordinated. Here, it is contended that there are some cases where competitive markets return sub-optimal outcomes because of factors such as market externalities and information asymmetry and such scenarios justify state intervention.[55] State failure advances the notion that government officials do not act in the public interest all the time, sometimes pursuing their own selfish interests, or interests of special groups. And when they do attempt to act in the interest of the public, they are unable to process pertinent information effectively to inform sound decision-making. These arguments can be distilled into two theories: the *public interest theory* and the *private interest theory*.[56] The public interest theory proposes that regulation seeks to protect and benefit the public in general, while the private interest theory proposes that regulation does not seek to protect the public at large just the interests of specific groups. These are explored in turn in the following sub-sections.

4.5.1. Public Interest Theory

This theory proposes that regulations are made to benefit society, as they are a response to the public's demand for the correction of unfair or inefficient markets.[57] Markets are considered unable to regulate themselves, so government intervenes. The thinking here is that regulatory actors represent and advance the interests of society in general. In law, the notion of public interest in regulation is traceable to Lord Matthew Hale in *The Portibus Maris* (1787),[58] who articulated that if there was only one public utility,[59] then, not only must the fees it charges be moderate, such a

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[53] This is especially important as this dissertation situates the failure of the transplantation of derivatives reform in Nigeria into one of the theoretical arguments.

[54] See generally David Slattery and Joseph Nellis, 'Rethinking the Role of Regulation in the Aftermath of the Global Financial Crisis: The Case of the UK' [2011] PANOECONOMICUS 407-423.

[55] See Joseph Stiglitz, 'Needed: A New Economic Paradigm' *Financial Times* (19 August 2010) <https://www.ft.com/content/d5108f90-abc2-11df-9f02-00144feabdc0> accessed 20 February 2019; Robert Skidelsky, 'Why Markets Need Governments' *OECD Observer* (May 2010); Joseph Stiglitz, Tapping the Brakes: Are Less Active Markets Safer and Better for the Economy? (paper presented at the Federal Reserve Bank of Atlanta 2014 Financial Markets Conference Tuning Financial Regulation for Stability and Efficiency April 15, 2014); Patrick Spread, 'Asymmetric Information, Critical Information, and the Information Interface' [2015] 70 Real-world Economics Review 120-140.

[56] Michael Hantke-Domas, 'The Public Interest Theory of Regulation: Non-Existence or Misinterpretation?' [2003] 15 European Journal of Law and Economics 165–194.

[57] See generally Arthur Pigou, *The Economics of Welfare* (London: Macmillan 1932).

[58] Matthew Hale, I, A Treatise *de lure Mari's et Brachiorum Ejusdem*; II, *Dc Portibus Maris*; III, Concerning the Customs of Goods Imported and Exported.

[59] Lord Hale had made reference to ports, wharfs, and cranes.

utility becomes "affected with a public interest and, consequently, the business [ceases] to be *juris privati* only to become *juris publici*".[60]

Described more relevantly, "regulation is government intervention triggered by market failure, a situation where the price mechanism breaks down and the allocation of resources is sub-optimal."[61] Against the backdrop of available resources being scarce, this theory thus postulates that public interest is best served by the best possible allocation of resources. Even though there is some theoretical evidence that, given some conditions, the allocation of resources could be effective,[62] it is the absence of these conditions that provoke the need for regulation. The efficient allocation of resources manifests where "the benefits of government intervention outweighs its costs",[63] with a survey of the literature[64] showing that regulation and intervention is justified based on the existence of market failures, which Hertog summarises as: "imperfect competition, unbalanced market operation, missing markets, and undesirable market results".[65] Imperfect competition refers to circumstances where competition in a market is uneven, with one or more actors seeking to dominate unfairly or limit competition. Unbalanced market operation refers to circumstances where there is excessive market competition, with prices dropping below average cost and or prices fluctuating widely. Missing markets refer to circumstances where markets do not exist notwithstanding the demand for relevant goods or services due to the existence of information asymmetries or excessively high transaction costs. Undesirable market results refer to circumstances where market participants are not rewarded in accordance with their productive contribution. The crux of this theory, therefore, is that regulation is deployed as a tool to cure the foregoing market failures *via* the application of collective power through government.

4.5.2. Private Interest Theory

This theory, of which there are various strains, prioritises the interests of private undertakings, persons, and entities over those of the general populace. It contends that interests within the economy exert control over institutions and agencies of government to achieve and further their own financial interests at the expense of larger society. Under one strain, it is argued here that

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[60] Hantke-Domas (n 56).
[61] Imad Moosa, *Good Regulation, Bad Regulation: The Anatomy of Financial Regulation* (Palgrave Macmillan 2015) 7.
[62] Kenneth Arrow, "The Potentials and Limits of the Market in Resource Allocation" in George Feiwel (eds) Issues in Contemporary Microeconomics and Welfare (London: Macmillan 1985).
[63] Johan Den Hertog, "General Theories of Regulation", in Boudewijn Bouckaert and Gerrit De Geest (eds), Encyclopaedia of Law and Economics (Cheltenham: Edward Elgar 2000) 10.
[64] See Stephen Breyer, *Regulation and Its Reform* (Cambridge: Harvard University Press 1982), Anthony Ogus, *Regulation: Legal Form and Economic Theory* (Oxford Claredon Press 1994) and Cass Sunstein, *After the Rights Revolution: Reconceiving the Regulatory State* (Cambridge: Harvard University Press 1990).
[65] Hertog (n 63).

elements in the financial industry control government institutions (including the administrative and regulatory agencies) with oversight over economic affairs/matters and, with this control, these interests achieve their own ends.[66] These agencies are, in this way, "captured". This 'capture theory' essentially is a type of corruption because captured agencies are often set up with some public good in mind; however, over time, they become susceptible to the influence and control of the very actors they were established to regulate. In the end, it is argued, regulation comes to serve the interests of regulated actors.[67] Hantke-Domas describes how this might happen:

> "For example, it is assumed that legislators subject [regulated actors] to additional regulation by an agency if the misuse of … economic position is detected. In the course of time, other political priorities arrive on the agenda and the monitoring of the regulatory agency is relaxed. The agency will tend to avoid conflicts with the regulated company because it is dependent on this company for its information. Furthermore, there are career opportunities for the regulators in the regulated companies. This leads in time to the regulatory agency coming to represent the interests of the branch involved".[68]

Political scientists explain that this capture occurs at the point where regulators are established and that there are three levels. First, because of pressure advanced by regulated entities, regulators allow regulated entities breach extant regulation. Second, regulators help regulated entities avoid regulatory action after breaches. Third, capture becomes so extensive that regulators may even provide regulated entities with guidance as to how to navigate and avoid extant regulatory imperatives. Interestingly, one scholar suggests that the more a jurisdiction or financial centre "becomes dependent on the success and development of its financial system for its overall economic growth, the more the policy makers and administrative regulatory agencies of that jurisdiction become prone to regulatory capture by the financial industry."[69] The anchor underpinning this theory is economic in nature, given that interested elements in regulated industries are often extremely motivated and remarkably well-funded, as opposed to individual customers who are not generally positioned to influence regulation or indeed policy in any impactful way. Indeed, it is propounded that this tendency extends well beyond just regulated entities and regulators, and that vested interests are naturally incentivised to control anything that has power or an effect over their

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[66] Richard Posner, 'Theories of Economic Regulation' [1974] 5(2) The Bell Journal of Economics and Management Science 335-358.

[67] "Capture" can also take the form of the existence or exploitation of conflicts. For example, in the US, it was highlighted that Mrs Wendy Gramm, spouse of Senator Phil Gramm, was on the board of Enron, a user of OTC derivatives, when the then Senator promoted the *Commodity Futures Modernization Act*, which liberalised OTC derivatives. See Barry Ritholtz, 'Credit Default Awaps are Insurance Products. It's Time We Regulated Them as Such' *Washington Post* (11 May 2012) <http://www.washingtonpost.com/business/credit-default-swaps-are-insurance-products-its-time-we-regulated-them-as-such/2012/03/05/gIQAAUo83R_story_1.html> accessed 3 July 2019.

[68] Hantke-Domas (n 56).

[69] Christopher Buttigieg, 'An Evaluation of the Theories and Objectives of Financial Regulation Post The 2007-2009 Financial Crisis: A European Perspective' [2012] ELSA Malta Law Review 122-152.

activities, manifesting what is described as "deep capture".[70] The implication here is that regulators act in the interest of regulated entities rather than the general public by being amenable to special interests shaping, diluting, weakening, or repealing regulations. They could also lend themselves to being manipulated by special interests.[71] A ready example of this is the US Congress' act of weakening the 'Volcker Rule' in 2010, which precludes commercial banks from trading securities on their own account.[72]

Yet another strain of the private interest theory is the 'economic theory of regulation'[73] (also known as the 'Chicago theory of government'[74]). The principal argument here being that "as a rule, regulation is acquired by the industry and is designed and operated primarily for its benefit."[75] This more refined strand of the private interest theory advances the notion that members of society push their self-interest and do so in a rational manner. Because "the state has … the power to coerce",[76] regulation, which these organised actors can incite or influence, is the consequence of demand and supply, while the creation and the type of regulation which is produced by politicians arises as a response to the requests of interest groups which ostensibly benefit from such measures. The benefits for such actors would be things like regulatory/statutory barriers to entry, which limit competition, or the creation of captive markets, or the institution of minimum pricing. Regulation is therefore employed as a tool to redistribute income rather than an instrument of correcting market imperfections and enhancing efficiency. As a practical matter, the interested industry will have to procure the achievement of their regulatory objectives through the actors who control the levers of government and pay the price either by way of votes or other resources.[77] Further down in this chapter, we will see how the private interest theory manifests in unravelling the flaws of the Nigerian derivatives regulatory reform process.[78]

4.5.3. Interplay Between Financial Regulation Theories and Transnational Law

Might there then be an interplay between these theories of financial regulation and transnational law, for the purpose of this study? Vitally, these theories provide a basis to draw upon in an attempt

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[70] Jon Hanson and David Yosifon, 'The Situation: An Introduction to the Situational Character, Critical Realism, Power Economics, and Deep Capture' [2004] 152(1) University of Pennsylvania Law Review 129-344.
[71] See generally Amitai Etzioni, 'The Capture Theory of Regulations—Revisited' [2009] 46(4) Journal Society 319-323.
[72] Anat Admati and Martin Hellwig, *The Bankers' New Clothes: What's Wrong with Banking and What to Do about It* (Princeton: Princeton University Press 2013) 3.
[73] Posner (n 66).
[74] George Stigler, 'The Theory of Economic Regulation' [1971] 2(1) Bell Journal of Economics and Management Science 3-21.
[75] Ibid.
[76] Ibid.
[77] Ibid.
[78] See below at 4.6.2.

to theorise on transnational law flows (in the context of financial law reform), and, more importantly, there is distinct relevance to the arguments being made in the present chapter about how some of the desired outcomes which informed reform in the Nigerian derivatives regulatory framework have been lost. What this dissertation views as the defective transnational flow of derivatives reform into Nigerian law appears to have long occurred within the boundaries of the public interest versus private interest debate.

Relevant to this study, some think that transnational law ought only be regarded basically as a "complement to the otherwise applicable domestic law".[79] The broad view under this account is that regulation is generated by actors who are not agents of the state or the state itself.[80] The opposing view to this is that transnational law is autonomous and anational, ostensibly informed by influences of the law merchant (*lex mercatoria*).[81] Under this view, emphasis is placed on the fact that a connected community of merchants generate norms with the principal aim of facilitating trade and avoiding the pitfalls associated with the diversity and complexity of nation-states' legal systems.[82]

Extant financial regulatory realities have advanced matters beyond the foregoing academic arguments though, with globalisation, financialisation, etc. now forcing more practical theoretical framings, especially post the GFC. Given this, some now conceptualise transnational law as being 'international soft law'.[83] Placing emphasis on the process of making laws, one scholar theorises about the limits of the "traditional dichotomy of custom and state law [which] is no longer sufficient to cope with the multitude of rules which govern economic life."[84] Relatedly, another contextualises it within contemporary legal pluralism, theorising that transnational law is an element within the "multiple legal regimes of international business, whether state law or nonstate law".[85] Most recently, another scholar theorises that adjudication by national courts is consistent with understanding standard form OTC derivative contracts as transnational law.[86]

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[79] Klaus Peter Berger, *The Creeping Codification of the New Lex Mercatoria* (Alphen aan den Rijn: Kluwer Law International, 2nd ed, 2010) 61.
[80] This theory may lend some credence to the argument made in this chapter about the flow of derivatives law reform into Nigeria and the existence of capture by private interests.
[81] Roy Goode, 'Rule, Practice, and Pragmatism in Transnational Commercial Law' [2005] 54(3) International and Comparative Law Quarterly 539-562.
[82] Note that this does not detract from the finding of private capture.
[83] Mario Giovanoli, 'The Reform of the International Financial Architecture After the Global Crisis' [2009] 42 New York University Journal of International Law and Politics 81-122.
[84] Jürgen Basedow, 'The State's Private Law and the Economy: Commercial Law as an Amalgam of Public and Private Rule making ' [2008] 56(3) The American Journal of Comparative Law 703-721.
[85] Robert Wai, 'The Interlegality of Transnational Private Law' [2008] 71 Law and Contemporary Problems 71-107.
[86] Braithwaite (n 41).

All the foregoing understood, as it concerns this work, even though this study accepts the submission that the normative constitutive framework for international finance, business, and commerce (all of which apply to derivatives trading) is varied, consisting of state laws, public international law, private international law, and various normative orders connected to both state and private actors, it is submitted that there remains insufficient theoretical clarity as to how transnational norms, once domesticated into local law, should be regarded.

At this stage, we simply do not know enough about this very important topic, but one fact that is apparent is that transnationalisation is helping to import and domesticate manifestations of some of these long-fought theoretical battles into hitherto unaffected legal systems, with uncontemplated practical consequences. This, this study submits, is the interplay between these theories of financial regulation and transnational law. Consider, for example, the central arguments in this work (which is that contextual and substantive attention was not paid to the ontology of the Nigerian legal and financial system in enacting recently transplanted derivatives reforms). How the Nigerian financial law jurisprudence will develop in light of this is unclear. Sophisticated contractual principles and statutory subjugation of traditional insolvency principles have been imported into Nigerian law, without due consideration of how the extant legal system might react.[87] Crucially, this remains a major vulnerability of transnational law: it remains incapable of developing a complete conceptual legal theoretical framework to satisfactorily explain the globalisation of legal norms, a prime example being derivatives reform in Nigeria. Therefore, we will conclude on this point by submitting that transnationalisation itself is by no means a settled concept, practically or theoretically. But it is outside the focus of this work to go into these debates in disproportionately elaborate detail. One thing that is clear, however, is that it has helped facilitate reform into Nigerian derivatives law, an act which has also facilitated some very real problems.

4.5.4. Synthesis: Theoretical Drivers Surrounding Derivatives Reform in Nigeria

Unquestionably, all the theories explored above provide some insight into what has informed derivatives reform in Nigeria, especially post the GFC, and how said reform has come to be within Nigerian law. Helpfully, as the Turner Review notes, the GFC "raises important questions about the intellectual assumptions on which previous regulatory approaches have largely been built. At the core of these assumptions has been the theory of efficient and rational markets … these assumptions [are] now subject to extensive challenge on both theoretical and empirical grounds, with potential implications for the appropriate design of regulation and for the role of regulatory

[87] Or indeed how it was previously ordered.

authorities."[88] Proceeding with this in mind, the question which follows concerns whether an appropriate design was conceptualised in the mind of Nigerian regulatory and legislative actors before derivatives reform was effected into Nigerian law *via* the CAMA 2020.

In answering this question, this dissertation would proceed by first prefacing with the point that sometimes regulation is made with the larger public interest in mind,[89] just as it is the case that sometimes private interests exert capture over regulators or indeed precipitate regulation favourable to themselves at the expense of the larger public.[90] This is a reality that occurs when political systems collide with financial systems.[91] Therefore, it would be simplistic to apply or accept, without question, either the public interest theory or the private interest theory frames of references as part of the conceptual premise for how derivatives reform in Nigeria has been ordered.

So, precisely, what theoretical assumptions have driven this reform? We will proceed by noting firstly that modern financial regulation is not driven by any one set of circumstances,[92] but rather by a multitude of factors, hinged upon what the relevant legislative or regulatory authority in any given context considers to be in the interest of the 'public good'.[93] Note that 'public good' employed here concerns the pressure on regulators and the government to furnish public good to the populace in terms of financial stability that had been hitherto under-supplied in the run up to the GFC.[94] It would also differ from jurisdiction to jurisdiction; in developing countries such as Nigeria, this notion extends beyond the notion of financial stability, as would be readily apparent in financial regulation in developed countries post GFC reform.

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[88] Financial Services Authority, 'The Turner Review: A Regulatory Response to the Global Banking Crisis' (March 2009) 39.

[89] For example, in September 2016, a law on interest rate controls, which set a ceiling for lending rates at four percentage points above a "reference rate" and a floor on deposits at 70 percent of the "reference rate" received unanimous approval from the Kenyan Parliament. See John Diso and Humphrey Malolo, 'Kenya's Parliament Approves Retaining Interest Rate Cap, Against IMF Wishes' *Reuters* (30 August 2018) <https://uk.reuters.com/article/uk-kenya-economy/kenyas-parliament-approves-retaining-interest-rate-cap-against-imf-wishes-idUKKCN1LF1L4> accessed 6 June 2019.

[90] Dan Awrey, 'Regulating Financial Innovation: A More Principles-Based Proposal?' [2011] 5(2) Brooklyn Journal of Corporate, Financial & Commercial Law 274-315 ("The global financial crisis serves as a powerful reminder that the incentives of private actors will often diverge from the broader public welfare.")

[91] See Daniella Cheslow, 'Consumer Protection Bureau Aims To Roll Back Rule For Payday Lending' *NPR* (6 February 2019) <https://www.npr.org/2019/02/06/691944789/consumer-protection-bureau-aims-to-roll-back-rules-for-payday-lending> accessed 6 June 2019 ("Critics say the consumer protection bureau is siding with the very industry it is supposed to regulate and is scrapping a rule that would have protected borrowers from skyrocketing interest rates.")

[92] Mads Andenas and Iris Chiu, *The Foundations and Future of Financial Regulation* (Routledge 2014) 3 ("… regulation serves a number of different objectives …")

[93] See generally Inge Kaul, Pedro Conceição, Katell Le Goulven and Ronald U Mendoza, "Why Do Global Public Goods Matter Today?" in Inge Kaul, Pedro Conceição, Katell Le Goulven and Ronald Mendoza (eds), *Providing Global Public Goods: Managing Globalization* (New York: Oxford University Press 2003).

[94] Federico Lupo-Pasini and Ross Buckley, 'Global Systemic Risk and International Regulatory Coordination: Squaring Sovereignty and Financial Stability' [2015] 30(4) American University International Law Review 665-741.

The imperatives driving regulatory actors in developed markets (such as the UK, for example) therefore are different to those driving regulatory actors in developing markets. To illustrate: monetary policy against the backdrop of declining oil prices would be the concern of a reserve bank in an extractive developing economy such as Nigeria, while a reserve bank in a more developed economy would be more concerned with systemic risk or regulatory equivalence. Another example: the US, with its deep and liquid markets, has historically prioritised investor protection,[95] while the EU, driven by ambitions of European integration (or European federalism, as some argue for),[96] has prioritised exactly this in addition to continental convergence. Therefore, in articulating a theory or basis for financial regulation and reform in the Nigerian derivatives market, one must be mindful of these nuances.

As a general matter, as such, the view in this study is that the traditional theories of financial regulation are flawed to this extent in that they do not contemplate these nuances and multiplicity of objectives which inform regulation.[97] Old paradigms have given way to this as an important priority, because "transaction-based narratives in financial regulations are being fused with … wider financial stability concerns beyond the issues of agency or market discipline".[98] It might, as such, no longer be useful to describe financial regulation in the basic economic parlance of 'market failure', simply designed to address information asymmetry and the problems of agency.[99] For countries such as Nigeria, the regulatory imperatives which matter to regulatory actors are much more practical and much less esoteric.

Given all these,[100] as far as Nigeria is concerned, therefore, this dissertation posits that the recent derivatives reform appears to have been driven principally by the objective of financial market development.[101] Nigerian market participants, infrastructure providers, and even regulatory actors

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[95] John Coffee, 'Racing Towards the Top?: The Impact of Cross-Listings and Stock Market Competition on International Corporate Governance' [2002] 102(7) Columbia Law Review 1757-1831.
[96] Dennis Mueller, 'Federalism and the European Union: A Constitutional Perspective' [1997] No. ¼ (90) Public Choice 255-280.
[97] Maybe it is the case that these theories were propounded when these nuances were inconsequential.
[98] Augusto de la Torre, 'Regulatory Reform: Integrating Paradigms' [2010] 13(1) International Finance 109-139.
[99] Eric Posner and Adrian Vermeule, 'Crisis Governance in the Administrative State: 9/11 and the Financial Meltdown of 2008' [2009] 76 University of Chicago Law Review 1613-1681.
[100] Literature on financial regulation does recognise alternative views other than economic rationale for regulation such as social justice, rights, and distributive welfare, so this is in no way a radical view. See generally Fiona Haines, *The Paradox of Regulation: What Regulation Can Achieve and What It Cannot* (Cheltenham: Edward Elgar 2011) and Justin O'Brien, 'Snaring Leopards: Tracking the Efficacy of Financial Regulatory Reform in the Aftermath of Crisis' [2010] 12(2) Oregon Review of International Law 213-244.
[101] Ralph Chami, Connel Fullenkamp and Sunil Sharma, 'A Framework for Financial Market Development' [2009] IMF Working Paper WP/09/156.

are on record as this being the principal driver of reform.[102] This is not to suggest that traditional justifications such as investor protection, institutional regulation, and macro-prudential regulation, all flowing in one way or the other back to the traditional theories of financial regulation do not matter in Nigeria. They do.[103] Rather, what must be understood is that Nigerian financial market actors also view regulation as a way to leapfrog the development of the derivatives market.[104] In other words, employing financial regulation as an instrumentality to stimulate financial market development is the more compelling imperative in Nigeria at present. So, because regulatory impediments or the absence of a robust regulatory framework are key inhibitors to the (a) introduction and development of derivative products and (b) the construction of infrastructures for mitigating risk in derivatives markets, what has informed reform in Nigeria is the *theoretical* assumption that the regulatory environment must be changed for a positive outcome—in this case financial market development (with its broader economic impact)—to be achieved.[105]

Added to this, what must also be understood is that this notion of financial market development does not necessarily mean the same thing to all the relevant stakeholders in Nigeria. Indeed, it is the case that some stakeholders in Nigeria have limited understanding of the markets,[106] while some merely seek to employ their understanding to advance their economic positions.[107] What is more, as was made clear in chapter 3, that desired objective has yet to be achieved. The following section explains how this has come to be.

4.6. Failures of Transnational Flow of Reform into Nigeria

[102] See, for example, Urowayino Jeremiah, 'NSE Intensifies Efforts to Introduce Derivatives to Nigerian Capital Market' *Vanguard* (11 September 2020) <https://www.vanguardngr.com/2020/09/nse-intensifies-efforts-to-introduce-derivatives-to-nigerian-capital-market/>; Iheanyi Nwachukwu, 'Nigeria's SEC Says Derivatives Trading One of its Top Priorities in 2020' *BusinessDay* (6 January 2020) <https://businessday.ng/markets/article/nigerias-sec-says-derivatives-trading-one-of-its-top-priorities-in-2020/>; and Helen Oji, 'FMDQ Targets Derivative Products in Q1 2020, Plans Equity Trading' *The Guardian* 20 August 2019 <https://guardian.ng/business-services/business/fmdq-targets-derivative-products-in-q1-2020-plans-equity-trading/> all accessed 4 March 2020.

[103] It is reasonable to conclude that the SEC issued the SEC Derivatives and CCP Rules to address some of these important issues.

[104] Ibid.

[105] To illustrate, actors in the Nigerian financial markets tend to point to Mexico's dexterity with derivatives as a case study. Over the years, Mexico has taken the step of hedging its crude oil output to minimise the prospect of budget uncertainty and instability. Under its hedging programme, the Mexican government is able to achieve clarity and certainty as to its projected crude revenues and it is therefore able to plan expenditure accordingly. See Javier Blas, 'Uncovering the Secret History of Wall Street's Largest Oil Trade' *Bloomberg* (4 April 2017) <https://www.bloomberg.com/news/features/2017-04-04/uncovering-the-secret-history-of-wall-street-s-largest-oil-trade> accessed 22 August 2019.

[106] See 4.6.1. below.

[107] See 4.6.2. below.

The following sub-section critically analyses the transnational flow of reform into the Nigerian regulatory framework and identifies factors which rendered the reform process defective.[108] These factors constitute the principal building blocks for the central argument made in this chapter.

4.6.1. Limited Understanding of Borrowed Reform—the *Ferreri* and *DiMatteo* Test

Before commencing the process of reforming the derivatives regulatory framework, thorough understanding of the reform sought to be borrowed ought to have been generated by Nigerian legislative, regulatory actors, and even relevant market participants as a basic starting point. Ferreri and DiMatteo map out a very useful three step test to a successful borrowing which addresses this issue of fundamental understanding. They explain:

> "In order to increase the chances of a successful transplantation, the following best practices should be followed. First, lawmakers should acknowledge that transplanting requires *a deep understanding of the law being transplanted*. Second, lawmakers should make sure the law being transplanted is a proper fit for the existing law of the transplanting country. Third, lawmakers must provide proper guidance in the new law, such as detailed definitions and cross-referencing" (*emphasis added*).[109]

From the extent of the defects which remain outstanding as found by this dissertation,[110] even following much heralded reform, there is no indication at all that these three critical steps were followed by relevant actors in Nigeria. From engagement with local market participants, the researcher is aware that lawmakers were not at all involved in the drafting process and had extremely limited engagement with the content of the CAMA 2020 which would go on to become law. No documentary evidence exists (such as a white paper, for example) to indicate that the National Assembly appreciated whether or not the derivatives reform that was being enacted would suffice to engender the larger theoretical objective of financial market development as was being exhorted by market actors.[111] Rather, what was found was narrow reference made by the sponsor of the bill, a senator, in describing changes which were being introduced by the enactment of the CAMA 2020. Specifically, the senator said:

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[108] Figure: 4.1. above maps the transnational flow of derivatives reform into Nigerian law.
[109] Silvia Ferreri and Larry DiMatteo (n 2).
[110] See chapter 3 in general.
[111] However, the researcher did find a report submitted by the Technical Advisory Committee on the Companies and Allied Matters Amendment Bill to the Senate Committee on Trade and Investment dated 23 January 2018 <https://www.proshareng.com/admin/upload/report/12119-ReportoftheCAMASubCommitteeFINALJan2018-proshare.pdf>. From all indications, at the reform stage, focus was being channelled only on the wholesale financial market transactions space because the report notes: "FMDQ OTC [proposed] the implementation of model netting provisions as a means of mitigating *credit risks associated with over-the-counter derivatives*" (*emphasis added*).

> "[the] introduction of model netting provisions in the bill [would mitigate] credit [risk] … promote financial stability and investor confidence in the Nigerian financial sector, and increase investor confidence, … as well as *all sectors of the economy*" (*emphasis added*).[112]

For reform so limited in scope, addressing just the enforceability of netting agreements in bilateral financial market transactions, the grandness of the purported outcome described by the senator reveals a fatal lack of understanding of the borrowed reform which was eventually transposed into Nigerian law. Vast legal and regulatory defects remain unaddressed within the local regulatory framework, betraying a thorough lack of understanding and a general lack of rigour in the law-making process. Indeed, this dissertation takes the view that the Nigerian legislative system may have been more interested in borrowing the derivatives reform largely for the global prestige that comes with becoming an 'ISDA recognised netting jurisdiction'.[113] In receiving reform, therefore, the Nigerian legal system suffered from isomorphic pressures,[114] compelling it to replicate policies which other countries have enacted to simply keep up in the competition for private investment and economic development.[115]

Of course, it is accepted that a credible argument could be made that, properly considered, not all defects found by this study can be cured in the country's principal company law. Under this argument, it could be advanced further that some gaps could be cured by reforming the country's securities law, while others could be cured with the passage of standalone legislations. For example, the jurisdictional conflicts between the CBN and the SEC as it relates to derivatives regulation could be clarified in standalone legislation.[116] Still, the preponderance of evidence before the researcher indicates that a lack of understanding of the borrowed reform was most likely what was at play in the reform process. This conclusion is supported by the fact that reform which could have been set out in the CAMA 2020 such as those on financial collateral and taking security were not robustly advanced.

As explained in chapter 3, for a vibrant derivatives market, a collateral and security taking regime suited to bank lending, where all security taken by companies must be perfected, is impractical. Under Nigerian law, security created by companies must be perfected, a process which entails (a) stamping at the Stamp Duties Office, Federal Inland Revenue Service, and (b) registration at the

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[112] Deji Elumoye and Chuks Okocha, 'Senate Passes CAMA Amendment Bill' *ThisDay* (11 March 2020) <https://www.thisdaylive.com/index.php/2020/03/11/senate-passes-cama-amendment-bill/> accessed 11 November 2020.

[113] Giuditta Cordero-Moss, *Lectures of Comparative Law of Contracts* (University of Oslo Institute of Private Law 2004) 24.

[114] Paul DiMaggio and Powell Walter, 'The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields' [1983] 48(2) American Sociological Review 147-160.

[115] Kevin Leicht and Craig Jenkins, 'Political Resources and Direct State Intervention: The Adoption of Public Venture Capital Programs in the American States, 1974-1990' [1998] Social Forces 76.

[116] Chapter 6 (among other things) tackles the viability of such a proposal.

CAC. Admittedly, an attempt was made to address this in the new law, with section 222(14) of the CAMA 2020 exempting 'security financial collateral arrangements'[117] from registration requirements with the CAC. The draftsmen failed, however, in that while the obligation to register has now, arguably, been cured, the obligation to stamp remains. Unhelpfully, with Nigerian law providing that an unstamped document cannot be tendered in evidence, save in criminal matters,[118] counterparties to derivative transactions are effectively precluded by operation of law from tendering derivative transaction documents in civil proceedings if they are not stamped, meaning they are constrained to stamp these documents to preserve the right to tender them in court. It is therefore submitted that by any measure, the law-making system in Nigeria has failed the three-step Ferreri and DiMatteo test.

As part of the legislative process, Nigerian law makers and relevant regulatory actors ought to have conducted a thorough examination of jurisdictions where content from the *2006 ISDA Model Netting Act* had been enacted into law and then studied the similarities and differences between those countries and Nigeria. Such a process would have provided insight as to how derivatives reform should have been downloaded into Nigerian law. At the very minimum, it would have shown that much more was needed to achieve desired outcomes.

Unfortunately, this worrying lack of understanding extends to regulatory actors as well and remains ongoing. Following the enactment of the CAMA 2020, the companies' registry, the CAC, exposed to the public a draft Companies Regulations 2021 aimed at operationalising the reform contained in the new law. Curiously, it contains a 'notice of netting' form, prescribing in effect that companies should file notice of netting of arrangements which they enter into at the CAC. Figure: 4.2. which follows sets out an extract of the 'notice of netting. form contained in draft Companies Regulations 2021.

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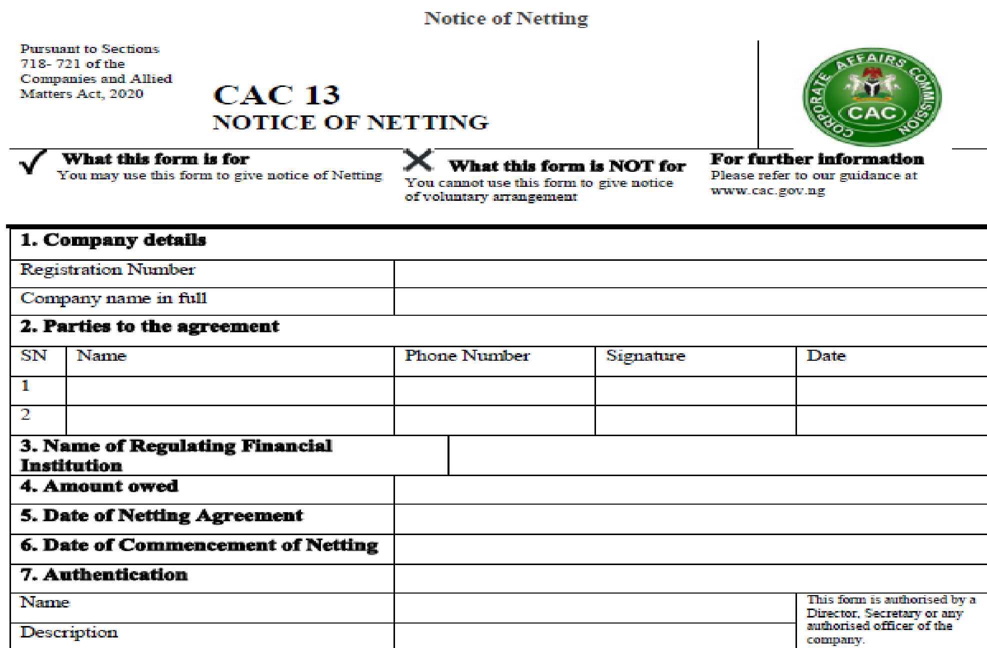
[117] Under section 222(13) of the CAMA 2020, a security financial collateral arrangement is "an agreement or arrangement evidence in writing, where: (a) the purpose of the agreement or arrangement is to secure the relevant financial obligations owed to the collateral-taker; (b) the collateral-provider creates or there arises a security interest in financial collateral to secure those obligations; (c) the financial collateral is delivered, transferred, held, registered or otherwise so designated so as to be in the possession or under the control of the collateral-taker or person acting on its behalf; any right of the collateral-provider to substitute equivalent financial collateral or withdraw excess financial collateral shall not prevent the financial collateral being in the possession or under the control of the collateral-taker; and (d) the collateral-provider and the collateral-taker are both non-natural persons."

[118] Section 22 of the *Stamp Duties Act 2004*.

Figure: 4.2.: Extract of "notice of netting" form contained in draft Companies Regulations 2021


Notice of Netting

Pursuant to Sections 718- 721 of the Companies and Allied Matters Act, 2020

CAC 13
NOTICE OF NETTING

What this form is for
You may use this form to give notice of Netting

What this form is NOT for
You cannot use this form to give notice of voluntary arrangement

For further information
Please refer to our guidance at www.cac.gov.ng

1. Company details				
Registration Number				
Company name in full				
2. Parties to the agreement				
SN	Name	Phone Number	Signature	Date
1				
2				
3. Name of Regulating Financial Institution				
4. Amount owed				
5. Date of Netting Agreement				
6. Date of Commencement of Netting				
7. Authentication				
Name			This form is authorised by a Director, Secretary or any authorised officer of the company.	
Description				

Even though this 'notice of netting' form did not make it into the final draft, the fact that it was even proposed reveals the extensive knowledge gap in the Nigerian financial regulatory arena. Firstly, the context in which the CAC might require notices of netting arrangements companies enter is difficult to understand. The proposed obligation serves no conceivable regulatory end. Inferably, the CAC viewed netting arrangements as creating some sort of security, such as a legal charge or mortgage, notice of which ought to be given by companies to the world. Of course, this is incorrect.[119] Secondly, requiring that companies file notices of netting arrangements with the companies' registry is operationally impracticable given how netting arrangements are entered into in the context of financial market transactions. To illustrate, how will a financial market participant file notice of a netting arrangement it has entered with the companies' registry in relation to an overnight repurchase agreement transaction? At which point will such a company be obliged to do so? Will it be before the transaction is effected or after the fact? How will this obligation work in the context of multiple financial market transactions between the same counterparties which all remain related by the single agreement principle? Will this obligation also apply to clearing entities which are party to netting agreements by virtue of how they operate and what they do. Thirdly, if filings on netting arrangements should be done at all, it should be to relevant financial regulatory entities such as the SEC or the CBN who oversee financial market participants. At least, the SEC and CBN are more likely to construct a realistic reporting template for the discharge of this obligation, however unusual it is. Thankfully, this proposed form did not make it into the final

[119] George Gretton, 'Financial Collateral and the Fundamentals of Secured Transactions' [2006] 10(2) Journal Edinburgh Law Review 209-238.

regulation. However, its contemplation reveals the large comprehension gap as it relates to derivatives regulation in Nigeria.[120]

4.6.2. Capture by Private Interests

As noted already, the insertion of the *2006 ISDA Model Netting Act* content into the CAMA 2020 was a culmination of advocacy and engagement implemented as between personnel from trade associations, exchange groups (particularly FMDQ and NGX), transaction advisory firms in Nigeria, and even ISDA itself leading to the question: *was the Nigerian state captured by interested actors within society such that it enacted these actors' interests, thinking it was enacting company law with a view to advancing public good*?

Before tackling this question, against the backdrop of the private interest theory which has been discussed above, it is crucial to understand how ISDA works.[121] A scholar explains:

> "…where the terms in ISDA's standardized documents conflict with the norms enshrined in national statutory or judge made law, ISDA actively works to *supplant or change* the latter so that it conforms to the former. ISDA hires local lawyers to investigate discrepancies between the terms of ISDA documents and national law, and where necessary, to lobby national governments to change national law to either conform to the terms of the Master Agreement or explicitly declare the ISDA documents enforceable. Partly at the urging of ISDA, and with active input from the transnational bodies are busy creating substantive legal rules concerning collateral that would apply in multiple jurisdictions and supersede national law" (*emphasis added*).[122]

Turning then to the question, let us start by unveiling whom the more prominent entities behind the insertion of the *2006 ISDA Model Netting Act* content into the CAMA 2020 are and what their main motivations might have been. The activities of the Technical Advisory Committee which worked on putting together the content which largely constitutes the CAMA 2020 was driven by elements from the organised private sector, the most prominent being nominees from market infrastructure groups, law firms, the banking sector, and trade associations.[123] These are "economic winners"[124] who would had long been advocating for the insertion of various provisions into the CAMA 2020 designed to safeguard and advance their economic interests. Being economic winners, the robust

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[120] See Companies Regulations 2021, available at: <https://www.cac.gov.ng/wp-content/uploads/2021/01/COMPANIES-REGULATIONS-2021-published.pdf>.

[121] A thorough understanding of how the body works helps provide an understanding as to the role of private capture by private interests.

[122] Annelise Riles, 'The Anti-Network: Private Global Governance, Legal Knowledge, and the Legitimacy of the State' [2008] 56(3) The American Journal of Comparative Law 605-630.

[123] Report submitted by the Technical Advisory Committee on the Companies and Allied Matters Amendment Bill to the Senate Committee on Trade and Investment dated 23 January 2018 <https://www.proshareng.com/admin/upload/report/12119-ReportoftheCAMASubCommitteeFINALJan2018-proshare.pdf>.

[124] Paul Stephan, 'Privatizing International Law' [2011] 97(7) Virginia Law Review 1573-1664.

reordering of the overall regulatory landscape, in the overall public good, may not have been of utmost priority for these actors. Such an understanding is easy to reach because conventional economic theory already tells us that economic actors' actions are driven by incentives if they stand to benefit.[125] Reinforcing this understanding, we also know that capture can materialise at any point during the regulatory process. We are cautioned:

> "It may occur when the legislature considers whether to create a regulatory regime, and the shape such a regime should take (the legislative phase), or when a regulatory agency considers exercising its delegated rule making powers (the rule making phase). It may also occur at the phase of supervision and enforcement by such an agency."[126]

In the context of inflowing derivatives reform into Nigerian law, therefore, specifically, law firms would have been interested mostly in advancing provisions which help originate more transactions for them. They would also have been incentivised by the marketing benefits that would come with being able to say that they helped draft the new law, as opposed to the broader merits or demerits of the proposed law which was being borrowed. Upon the enactment of a derivatives reform, as occurred in 2020, law firms would have seen an uptick in requests for legal advice from both local and foreign financial institutions which engage in derivative transactions in Nigeria. The exchange groups would have been more interested in establishing Nigeria as a netting jurisdiction on ISDA-terms—which, as is understood, had been engaged in strong lobbying efforts in Nigeria during the law-making process—to increase the velocity and liquidity of financial market transactions on their platforms, both on the trading and clearing spectrum. Note that these exchange groups are themselves owned by market participants (i.e., deposit money banks and securities dealing firms). With these exchange groups working with ISDA, hiring local counsel and transaction advisers to opine on discrepancies between the terms of ISDA documents and local law, while lobbying government actors vigorously to supplant local law, it is submitted that an asymmetry of incentives materialised in the enactment of the CAMA 2020.[127] When asymmetry of incentives are left unattended in the context of a private regulatory ordering, as is the case here, added to network externalities, path dependence, and power imbalances running rampant, outcomes can be perverse.[128] The legislative outcome here, it is submitted, borders on perverse. Figure 4.3. which follows maps how ISDA-driven derivatives reform is typically imported into local law.

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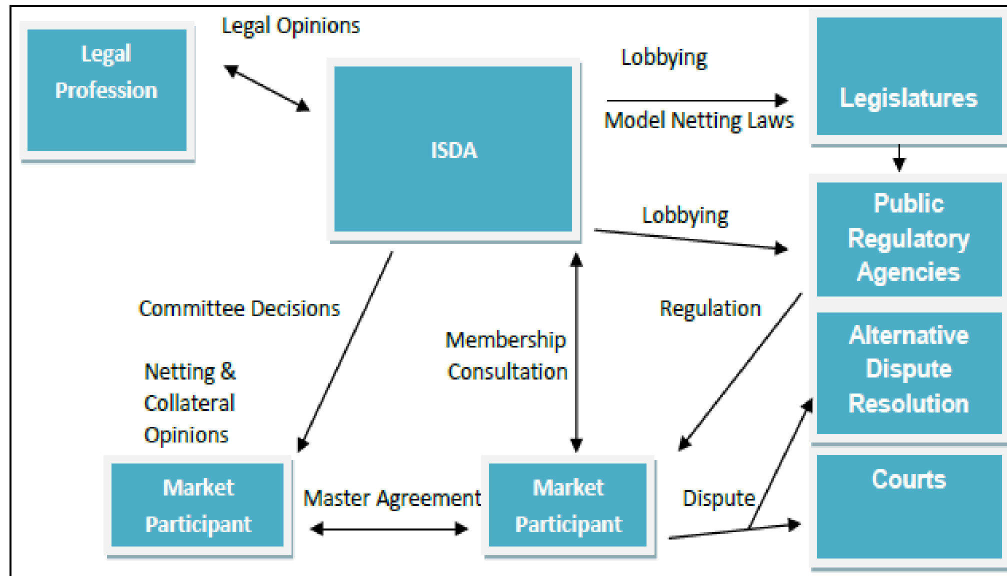
[125] Douglass North, *Institutions, Institutional Change and Economic Performance* (Cambridge University Press 1990) 135.
[126] Andrew Schmulow, Karen Fairweather, and John Tarrant, 'Restoring Confidence in Consumer Financial Protection Regulation in Australia: A Sisyphean Task?' [2019] 47(1) Federal Law Review 91–120.
[127] Johannes Karremans, The ISDA and the Containment of Financial Regulation in Europe, European Union Studies Association (EUSA) Conference, Denver, 11 May 2019 ("In sum … ISDA can be considered … as a counterforce to the strength of public regulation.")
[128] See generally Dan Awrey, 'The Limits of Private Ordering within Modern Financial Markets' [2014] 34(1) Review of Banking and Financial Law 183-254.

Figure: 4.3.: ISDA and the nation state



Source: John Biggins and Colin Scott, ' Private Governance, Public Implications and the Tightrope of Regulatory Reform: The ISDA Credit Derivatives Determinations Committees' [2013] Comparative Research in Law & Political Economy Research Paper No. 57/2013

Tellingly, in advocating that the *2006 ISDA Model Netting Act* be inserted into the CAMA 2020, the report submitted by the Technical Advisory Committee to the Senate pointed to justifications such as the fact that "[the] inclusion of netting provisions will minimise risks associated with the performance of certain large financial transactions"[129] and the fact that "[it] will make it easier for those financial institutions to obtain all the benefits of transactions that are generally regarded as an essential part of sound financial management, such as interest rate and currency swaps and other arrangements which hedge exposures".[130]

These kinds of justifications reveal that a focus on narrow economic interests, instead of broader market-wide or systemic motivations might have been at play during the law-making process,[131] which would explain why nothing was done in the CAMA 2020 to extend the certainty now associated with bilateral netting to multilateral netting, a solution which would have been useful to the retail segment of the capital markets which participates more in the equities space.[132] Disproportionate premium was placed on the interests of foreign investors and global banks.

[129] See n 123.
[130] Ibid.
[131] Abraham Newman and Elliot Posner, 'Structuring Transnational Interests: The Second-Order Effects of Soft Law in the Politics of Global Finance' [2016] 23(5) Review of International Political Economy 768-798 (noting that ISDA has been unable to reorient toward the Basel Committee as its hard-hitting style which is suited for the political arena is viewed as susceptible to capture).
[132] It also would have helped in creating the foundation for curing the gaps associated with appurtenant infrastructure highlighted in chapter 3.

Having explored the motivating driving all the relevant actors, this study answers in the affirmative the question as to whether the Nigerian state was captured by interested actors such that it enacted private actors' interests, all the while under the misapprehension that it was enacting company law reform with a view to advancing public good. Due to factors such as corruption, insufficient technical capacity, and an overall sub-optimal administrative apparatus, the machinery of government has become so dependent on the success and development of its financial system for its overall economic growth that it accorded unjustifiably disproportionate influence in the law-making process to private actors. In other words, the legislative system was captured during the law-making process. [133] Regulated and private sector actors who are/were extremely motivated and well-funded leveraged their positions to secure the enactment of legislation favourable to their interests. Consequently, what should have been the boundary between the now reformed company law and private actors' suggestions/proposals for the sovereign to consider was blurred in the law-making process. This study contends that these private actors' needs do not comport with the broader notion of public good as far as the Nigerian derivatives regulatory framework is concerned because recent reform enacted did not cure all the defects which ought to have been cured, had the law-making process not been captured.[134] Market participants and inappropriately incentivised actors cannot be tasked with writing rules without appropriate governance mechanisms in place. That is what happened in the reform process here.

4.6.3. Questionable Legitimacy

The point made about capture above logically leads to questions of legitimacy as far as the process and even outcome is concerned. Now even though Fabrizio Cafaggi has framed the transnational flow of regulation, as has occurred with derivatives reform into Nigerian law (which is mapped in Figure 4.1.) as "ex-post recognised private regulation",[135] associated with the matter of private interest capture explored above is the issue of the debatable legitimacy of the process which delivered the present statutory outcome. This is a key concern and is connected to the quality of legislative outcome achieved with reform in the Nigerian derivatives market.

As explained in chapter 1,[136] the country operates a constitutional democracy; therefore, one must be able to trace the heritage of its laws, in this case the CAMA 2020 and the derivatives reform contained therein, back to the legitimate law-making body, the National Assembly. Otherwise, the

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[133] Buttigieg (n 69).
[134] David Ong and Sheldon Leader, *Global Project Finance, Human Rights and Sustainable Development* (Cambridge University Press 2011) 319 (explaining how sovereignty can be bartered with the aid of private regulation with insufficient attention being paid to local needs).
[135] Fabrizio Cafaggi, 'Rethinking Private Regulation in the European Regulatory Space' [2006] EUI-LAW Working Papers 13 European University Institute.
[136] See chapter 1 at 1.9.

basic constitution of the recent derivatives reform as 'law', properly generated by the constitutional law making apparatus, becomes questionable.[137] In this case, this study has been able to trace authorship of Nigerian derivatives reform unarguably to private interests (domestic and international) whose incentives were different to what otherwise would have been the sovereign's incentives, if one was to go by the preamble of the *Constitution of the Federal Republic of Nigeria 1999* which lays credence to the "purpose of promoting the good government and welfare of all persons in [Nigeria]". Recall that it is submitted above that the recent derivatives reform appears to have been driven principally by the objective of financial market development, which would of course comport with the constitutional imperative of "promoting the good government and welfare of all persons". Here, in direct contrast, the generation of derivatives reform has taken place in a largely autonomous manner with no tangible input by the National Assembly,[138] making it difficult to establish a connection between the intention of the sovereign (which ordinarily ought to have been effectuated *via* the constitutional law-making apparatus) and the output contained in the enacted statute.

The unique role played by ISDA against the backdrop of this dynamic requires further exploration. *Is this finding of questionable legitimacy further made problematic by the role played by the transnational body*? In the broad field of international law, connected to the role which the *lex mercatoria* is theorised as playing in the increasing transnationalisation of commercial law and practices,[139] the question we are faced with here in relation to non-state transnational solutions such as the ISDA reform transposed into Nigerian law is uncomplicated:[140] *do these transnational actors taint the law-making process*? The debate is straight-forward;[141] ISDA's role is either as efficient transnational solution inevitable in modern day rule making or an exercise in undemocratic private rule making tainted with a lack of accountability and transparency.[142]

Notably, though, we have been urged to exercise caution in questioning the legitimacy of law simply because of the involvement of private interests in the generation of law. [143] We are also

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[137] Martin Herberg, 'Global Governance and Conflict of Laws from a Foucauldian Perspective: The Power/Knowledge Nexus Revisited' [2011] 2(2) Transnational Legal Theory 243–269.

[138] Ann-Marie Slaughter, *A New World Order: Government Networks and the Disaggregated State* (Princeton University Press 2004).

[139] Claire Cutler, *Private Power and Global Authority* (Cambridge University Press 2003) 16.

[140] Li-Wen Lin, 'Legal Transplants through Private Contracting: Codes of Vendor Conduct in Global Supply Chains as an Example' [2009] 57(3) The American Journal of Comparative Law 711-744.

[141] Mark Bovens, 'Analysing and Assessing Public Accountability: A Conceptual Framework' 14(4) European Law Journal 447-468.

[142] Ruth Grant and Robert Keohane, 'Accountability and Abuses of Power in World Politics' [2005] 99(1) American Political Science Review 29-43.

[143] See, for example, Louis Jaffe, 'Law Making by Private Groups' [1937] 51(2) Harvard Law Review 201-253. ("Participation in law-making by private groups under explicit statutory "delegation" does not stand then in absolute contradiction to the traditional process and conditions of law- making; it is not incompatible with the conception of law.")

urged to note that regulation is now "decentred",[144] a reality making it impracticable for states to be the sole generator of legal norms. Transnational law, by its very nature, [145] it is argued, has the misfortune of "being entangled in and contributing to the creation of increasingly complex, public-private as well as formal-informal, inter-legal regulatory arrangements".[146] We are further urged to approach these questions "against the background of a thorough analysis of the regulatory history and its domestic and transnational political economies across time and space."[147] The implication being that we are best served by delicately engaging with such legal content and regulatory arrangements as a source of law, as a consequence of which attempting to delineate between 'law' on the one hand and 'non law' on the other hand could very well be a useless endeavour.[148]

Still, not distracted by these exhortations, all of which are of course noted, the critical question for this study on this matter—in determining whether public good was prioritised, rather than subjugated from a law-making perspective during the reform process—is very simple:[149] was there meaningful legislative debate of the *2006 ISDA Model Netting Act* designed to shape reform one way or the other before insertion into the CAMA 2020? In other words, did the National Assembly author the reform in issue?[150] Without prejudice to the legislative procedures of the National Assembly, meaningful legislative debate would not be to simply rubber stamp the *2006 ISDA Model Netting Act* produced by the private actors who were involved in the drafting process.[151] Instead, the adoption of the final output would have been predicated by a thorough assessment of the desirability and appropriateness of adopting the *2006 ISDA Model Netting Act* with or without modifications. This would have been authorship. No such debate occurred; rather, process-wise, what occurred was an act of legislative rubber stamping.

The answer to the question posed therefore is no. To the governed, the ability to trace the ancestry of reform to the legitimate constitutional law-making apparatus goes to the degree as to which

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[144] Julia Black, 'Decentering Regulation: Understanding the Role of Regulation and Self-Regulation in a "Post-Regulatory" World' [2001] 54(1) Current Legal Problems 103–146.
[145] Zumbansen (n 50).
[146] Gunther Teubner, *Constitutional Fragments: Societal Constitutionalism and Globalization* (Oxford University Press 2012) (noting in general that crisis in traditional constitutionalism is caused by transnationalisation and privatisation).
[147] Ibid.
[148] Veerle Heyvaert, 'The Transnationalization of Law: Rethinking Law through Transnational Environmental Regulation' [2017] 6(2) Transnational Environmental Law 205-236.
[149] Steven Bernstein and Benjamin Cashore, 'Can Non-State Global Governance be Legitimate?' [2007] 1 Regulation & Governance 347–371.
[150] Ruth Krindle, 'The Law-Making Process' [1967] 2(2) Manitoba Law Journal 167-172.
[151] Stepan Wood, Kenneth Abbott, Julia Black, Burkard Eberlein and Errol Meidinger, 'The Interactive Dynamics of Transnational Business Governance: A Challenge for Transnational Legal Theory' [2015] 6(2) Transnational Legal Theory 333–369.

reform would be regarded as having been designed to advance the public good or otherwise.[152] Necessarily, this has to be the case—and be seen to be the case always—notwithstanding exhortations that legitimacy now extends beyond enacted statute and the democratic law-making process because law has been disembodied so dramatically in the context of a now globalised world. Accepting this means the question "[h]ow can effect be given to a norm that has been adopted through an opaque or unaccountable process?"[153] becomes impossible to answer.

Of course, this is not to argue that the traceability of the ancestry of law to the constitutional law-making process connotes that it will then in fact necessarily serve public good. Whether a law in fact serves the public good is a separate issue to the question of its legitimacy. As far as the recent reform in Nigerian derivatives law enacted in the CAMA 2020 is concerned, since its ancestry is not connectable to the National Assembly *in toto*, this study takes the view that its legitimacy is questionable. Whether law is good or bad goes to substance, a matter easily remedied by the enactment of an amendment or better law. Whether law is legitimate or otherwise, however, goes to the process; in other words, the soundness of the law-making architecture, because illegitimate law should not be law and should not manifest in a legal system.

4.6.4. Structural Sub-optimal Transplantation

For transplantation to be successful, it must be artfully implemented.[154] This means that intricate attention must be paid to the contextual circumstance of the recipient jurisdiction, because as Watson himself noted, "[c]ontext is everything".[155] With chapter 3 having discussed the legal and structural defects which persist in the Nigerian derivatives regulatory framework despite recent reform, this sub-section will focus, not on substantive law defects, but on the mechanics of the transplantation process, by testing them against an evaluative framework developed for the present purpose. Table 4.1. which follows outlines four evaluative determinants which help deconstruct the failures of the transplantation process.

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[152] Although it has also been noted that some of the concerns about legitimacy arise due to unease with which politicians and the political process is being rendered redundant. See Peer Zumbansen, 'The Ins and Outs of Transnational Private Regulatory Governance: Legitimacy, Accountability, Effectiveness and a New Concept of "Context"' [2012] 13(12) German Law Journal 1269-1578.

[153] Horatia Muir Watt, 'Private International Law Beyond the Schism' [2011] 2(3) Transnational Legal Theory 347-427.

[154] Coen Van Laer and Helen Xanthaki, 'Legal Transplants and Comparative Concepts: Eclecticism Defeated?' [2013] 34(2) Statute Law Review 128–137 ("Legal transplants have to be based on generic concepts relating foreign and national law in order to avoid haphazardness in the selection of better law and also to profit from lessons learned elsewhere.")

[155] Alan Watson, 'Ius Communis Lecture on European Private Law 2' (The Contribution of Mixed Legal Systems to European Private Law, Maastricht University, 18 May 2000).

Table 4.1.: Evaluative determinants which help deconstruct the failures of the transplantation process

S/N	Broad evaluative determinant	Evaluative parameter
1.	*Imperative for reform*	▪ Is there a fundamental need for reform? ▪ What is the scope of the required reform?
2.	*Transplanted content*	▪ What content is appropriate to achieve the intended reform?
3.	*Transplantation process*	▪ What is the approach best adopted to effect reform? ▪ How is the law-making process best utilised to generate reform which best advances public good?
4.	*Context*	▪ Is the current legal and regulatory context suited to accept the proposed transplanted content?

Developed by researcher

4.6.4.1. Imperative for Reform

The starting point is whether there was an imperative for reform in the regulatory framework in Nigeria. No one can argue that there has not long been a pressing need for reform. Derivatives play an important role in modern financial markets and developing countries such as Nigeria are very keen to leverage them to enhance and deepen their financial markets and, by extension, their broader economic compacts.[156] Therefore, basic questions as to the efficacy of netting and clearing arrangements and the ordering of the financial regulatory framework which have been explored in chapter 3 provide the justification as to why reform was—and indeed remains—required.

In addition to issues of regulatory fragmentation and an infrastructure 'race to the bottom' discussed in chapter 3 (especially on the trading side),[157] other issues identified in this study are:

- imprecise definition of derivatives;
- regulatory and jurisdictional conflict within the institutional structure of the regulatory framework;
- uncertainty as to efficacy of multilateral netting arrangements;[158]
- absence of statutory endorsement of CCPs' operations;
- gaps in collateral and security-taking regime; and

[156] See chapter 2 at 2.10. (outlining the benefits of derivatives).
[157] See chapter 3 at 3.5.
[158] Even though certainty has now been achieved in relation to bilateral netting, questions persist as to multilateral netting.

- gaps in CCP recovery and resolution regime.

A major problem with the transplantation process under this evaluative determinant is that the scope of the required reform was not appropriately dimensioned and understood. In other words, the draftsmen and legislators did not fully appreciate the scale of the defects in the regulatory framework.[159] Clearly, limited research preceded the reform process.[160] There is also no evidence that any comparative studies were carried out. This much, we can glean from the quality of legislative output. Had the gaps been adequately scoped, it would have been clear that enactment of the *2006 ISDA Model Netting Act* alone would be wholly inadequate. While it is accepted that some of these could not have been addressed in the CAMA 2020, matters which could have been cured in that law, such as gaps in the collateral and security-taking regime were not addressed in the law, establishing beyond debate that the scope of required reform was not at all understood.

4.6.4.2. Transplanted Content

The second evaluative determinant concerns the appropriateness of the borrowed reform. *What content is appropriate to achieve the intended reform discussed in this work*? Of course, the response to this is correlated to explanation set out in the sub-section above. Because the gaps in local law were inadequately scoped, the transplanted content was not appropriate. For the avoidance of doubt, this work does not argue that the *2006 ISDA Model Netting Act* is itself insufficient to address exactly what it was conceived for, which is "[setting out]… the basic principles necessary to ensure the enforceability of bilateral close-out netting, including bilateral close-out netting on a multibranch basis, as well as the enforceability of related financial collateral arrangements."[161] Rather, the point being made is that the content *alone* was/is inappropriate to effect the desired regulatory reform because it was/is grossly insufficient to address the scale of extant, market-wide defects.[162] Gaps as it relates to bilateral close-out netting was only one of the problems in the Nigerian derivatives regulatory framework. Therefore, under this evaluative determinant, it is submitted that the borrowed content was insufficient.

4.6.4.3. Transplantation Process

[159] See above at 4.6.
[160] Ibid.
[161] See "ISDA 2006 Model Netting Act", available at: <https://www.isda.org/2006/03/30/model-netting-act/#:~:text=The%20Model%20Netting%20Act%20is,of%20related%20financial%20collateral%20arrangements>.
[162] See chapter 3 generally.

The limitation of the borrowed reform is directly traceable to the weakness of the law-making process which conceived the CAMA 2020, which, as already explained, was utterly captured by local private interests. The completeness with which private interests captured the reform process affected the ability to generate comprehensive and far-reaching content, as these private actors were solely focused on advancing their interests. This is not to argue that private actors or market participants do not have a role to play in the law-making process. Clearly, it is important for law makers to understand concerns market participants might have and how proposed regulations might affect their business operations. And because derivatives are a very specialist segment in financial markets, this perspective is undoubtedly crucial as most law makers are unfamiliar with the mechanics of these instruments and how regulation should be designed to both encourage growth while simultaneously policing bad behaviour.

However, consideration of the market's perspective should have been only part of the transplantation process. Rather, as discussed in the present chapter, private sector (and indeed international) actors who are/were extremely motivated and well-funded captured the law-making process and exerted disproportionate influence derogating from overall public good. There were no public hearings, no white papers, or detailed reports to evidence a rigorous law-making process.

4.6.4.4. Context

Is the current legal and regulatory context suited to accept proposed transplanted content? The context (what shall be termed herein as 'conditions on the ground') in a recipient country is crucial to the success of a transplantation. These conditions on the ground are made up of factors such as relevant institutions, procedures, and social factors which will promote the seamless implementation of the transplanted reform.[163] From the findings outlined in chapter 3, it is clear that the broader financial regulatory system in Nigeria was not a fertile jurisdiction for the transplanted content, not because the content was/is not useful, but because the financial regulatory system was not prepared to absorb the transplanted content. Remarkably, even ISDA emphasised the importance of paying attention to condition on the ground in crafting derivatives reform legislation. The body notes:

> "… we suggest, as a first step, that careful consideration should be given to identifying in detail the relevant areas of local law that could potentially conflict with the effectiveness of netting agreements, so that all relevant issues are adequately covered by local legislation. These would typically fall in one or more of the following categories:

[163] Daniel Berkowitz, Katharina Pistor, and Jean-Francois Richard, 'The Transplant Effect' [2003] 51(1) The American Journal of Comparative Law 163–204.

(a) insolvency laws (including provisions of local law enacted for the prevention of insolvency), which most frequently are the primary obstacle;

(b) any specific mandatory provisions enacted for the protection of debtors generally (in addition to insolvency law) or for the protection of certain categories of debtors;

(c) gaming or wagering laws; and

(d) less frequently, other principles of domestic law."[164]

The body further notes:

> "We suggest that careful consideration be given to identifying any local policy considerations that may be relevant in the context for the adoption of netting legislation, so that the scope of the netting legislation is defined with clarity."[165]

In conclusion, all the predicate or accompanying steps that ought to have been taken for the benefits of derivatives reform in Nigeria to be optimised were not in place. Where favourable conditions are absent, legal transplantation will fail.

4.7. Conclusion

This chapter has explored the concepts of transplantation and transnationalisation, examining the normative relationship between both concepts, and then mapped out the transnational flow of derivatives reform into Nigerian law. It then set out the foundational theories of financial regulation, upon which it has constructed the theoretical drivers surrounding reform in Nigeria before finally deconstructing the failures of the transnational flow of reform into Nigerian law. As a practical matter, the central argument made in this chapter is that derivatives reform in Nigeria should have followed three principal building blocks. *First*, a thorough review and analysis of the legal state of play across the market and regulatory framework should have been effected. *Second*, this should then have been followed by a systematic identification of the relevant deficiencies (both legal and infrastructure-wise). *Third*, and finally, a benchmark process against international standards and/or comparable jurisdictions, synthesised against local legal and structural circumstances should then have been implemented to inform the final reform output. These steps were not taken; as such, much has been lost in the reform process. This chapter has shown that the working assumption was that reforming Nigerian derivatives law would be as simple as transplanting standardised ISDA language and documents into the CAMA 2020 alone. Taken together, all these regulatory

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[164] ISDA, "2018 ISDA Model Netting Act and Guide", available at: <https://www.isda.org/a/X2dEE/FINAL_2018-ISDA-Model-Netting-Act-and-Guide_Oct15.pdf>.
[165] Ibid.

inconsistencies and inadequacies have served to undercut the theoretical object of using regulation to engender financial market development.

Chapter 5 — What Others Do: Comparative Perspectives

5.1. Introduction

Having captured the key regulatory fractures in Nigeria (despite recent reform) in chapter 3 and theorised as to the causes of the defective reform in chapter 4, *inter alia*, this chapter addresses the second research question set out in chapter 1 (i.e., *how might the Nigerian legal and regulatory framework be improved upon*?). It does so by comparing the Nigerian legal and regulatory framework against the regulatory frameworks which exist in the UK and South Africa with a view to producing further insight into the fractures in the Nigerian regulatory regime and exploring key learning points which might inform reform in Nigeria.

Both comparator jurisdictions are home to some of the world's most active derivatives markets.[1] The UK and Nigeria share a common law heritage, while South Africa and Nigeria share a proximate geographical and economic relationship in Sub-Saharan Africa. For added value, this chapter also explores the institutional structure relevant to derivatives regulation in the US (where two financial market regulators exert purview over that jurisdiction's derivatives markets). In doing the foregoing, the chapter employs the two sub-analytical frameworks—(a) law and regulation and (b) appurtenant infrastructure—developed in chapter 3 as analytical parameters.

5.2. United Kingdom

Up until 1960, Nigeria was a territory of the UK and was thus bequeathed with a legal system built on the English common law tradition, as a result of which much of Nigeria's legislations, particularly those relevant to this work are modelled on the laws of England and Wales.[2] In fact, the first legislation on company law in Nigeria was the *Companies Ordinance of 1912*, which was largely modelled after the Companies (Consolidation) Act 1908, while the present CAMA 2020 is largely modelled on the Companies Act 1985.

Even though independence curtailed the applicability of English law in Nigeria, the decisions of English courts and British regulatory approaches (in general) retain persuasive effect in Nigerian legal jurisprudence, so it follows that it is useful to employ the UK derivatives regulatory regime

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[1] BIS, Triennial Central Bank Survey Foreign Exchange Turnover in April 2019 (16 September 2019) <https://www.bis.org/statistics/rpfx19_fx.pdf>.

[2] Anthony Allot, 'The Common Law of Nigeria' [1965] 10 International and Comparative Law Quarterly Supplementary Publication 31.

as a comparator jurisdiction, as they both belong to the 'common law family'.[3] Specifically, by comparing the regime in Nigeria and the UK, a more robust understanding of the state of the law in Nigeria can be generated, given that divergencies would readily come into focus once areas where the UK law is more mature are identified.[4]

5.2.1. Overview of Derivatives Framework

In the UK, the principal regulations relevant to derivatives are as follows: (1) FSMA; (2) EMIR; (3) MiFIR; (4) MiFID II; (5) EMIR Refit Regulation; (6) RAO; (7) MAR; (8) Short Selling Regulation; and (9) REMIT. EMIR is made up of three main pillars: (i) reporting of exchange-traded and OTC derivatives transactions to trade repositories; (ii) mandatory central clearing obligations in relation to specific classes of OTC derivatives (which covers certain classes of interest rate and credit derivatives); and (iii) risk mitigation techniques in respect of all OTC derivatives which are not subject to mandatory central clearing. It provides for a set of requirements that applies differently to market participants that are incorporated in the EEA depending on their categorisation under the regulation as either 'financial counterparties' or 'non-financial counterparties'. MiFID II (together with MiFIR) outlines the framework for the regulation of investment firms and their investment activities in the EEA. Investment firms are required to be authorised by the national competent authority in the member state where they are registered. Investment firms in the UK are therefore authorised by the FCA, with some large investment banks also being prudentially supervised by the PRA.

Note that with Brexit and after 31 January 2020, EMIR is to be 'onshored' into UK law *via* statute, with modifications replacing EU terms and references to regulatory authorities with the UK equivalents (so-called UKMIR). As at the date of writing, UK law does not make substantive changes to the provisions of EMIR, so this is what is examined in the present chapter, and it is considered good law for the purpose of this study.

5.2.2. Law and Regulation

The following sub-sections sets out a comparative analysis of relevant law and regulation as between the UK and Nigeria as it relates to this research.

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[3] Mark Van Hoecke and Mark Warrington, 'Legal Cultures, Legal Paradigms and Legal Doctrine: Towards a new model for Comparative law' [1998] 47(3) International and Comparative Law Quarterly 495-536.

[4] Recall that point made in chapter 4 that once a law transplanted into another jurisdiction, how relevant legal rules and jurisprudence might thereafter develop might be different to how they do so in the source jurisdiction. It is important to bear this in this in mind throughout the present chapter.

5.2.2.1. Definitional Foundations

UK law engages with derivatives from a schematic standpoint (as opposed to prescriptive), with the FSMA setting out provisions generally applicable to the financial instrument. In terms of definition, schedule 2 part II of the FSMA and part III of the RAO start by first creating a broad category referred to as 'specified investments'[5] under which relevant financial instruments are then laid out and described distinctly. So, under 'investments' we have separate classes such as 'securities', 'instruments creating or acknowledging indebtedness', 'government and public securities', 'instruments giving entitlement to investments', 'certificates representing securities', 'units in collective investment schemes', 'options', 'futures', 'contracts for difference', and 'contracts of insurance', among others.

<u>*Comparison*</u>

What becomes quickly apparent is that this is a deliberate approach to defining derivatives, as it avoids the conflation found in Nigerian law whereby a "derivative" is described simply as a "security".[6] This means that there is more regulatory clarity as to how derivatives should then be tackled as the peculiar financial product they are and how the relevant regulatory perimeter is subsequently constructed around them. This regulatory clarity informs the UK law's two-pronged focus on setting out (a) rules on who can engage in derivatives trading and (b) rules on public promotion. Specifically, section 19 of the FSMA stipulates that no person may carry on a regulated activity in the UK, or purport to do so,[7] unless he is (a) an authorised person; or (b) an exempt person, while section 21 of the FSMA outlines a financial promotion restriction which provides that a person must not, in the course of business, communicate an invitation or inducement to engage in investment activity unless he/she is an authorised person, or the content of the communication is approved by an authorised person, or the communication is covered by an exemption.[8] Entities registered with the FCA are required to abide by the provisions set out in the COBS. These provisions outline important obligations on client categorisation, communicating with clients (including financial promotions), suitability and appropriateness, and best execution.[9] The regulatory ambit of the FSMA extends to both ETDs and OTC derivatives, with rules—on

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[5] 'Specified' means specified by an order of the Treasury and the activities that have been specified as regulated activities by the Treasury.
[6] See chapter 3 at 3.2.
[7] A regulated activity is a specified activity that relates to a specified investment or property of any kind and is carried on by way of business in the UK. See article 4 of the RAO.
[8] See in general *FCA v Noerus Investments Ltd* [2017] EWHC 3256 (Ch).
[9] See "Conduct of Business Sourcebook", available at: <https://www.handbook.fca.org.uk/handbook/COBS.pdf>.

standard matters such as liability for misleading statements[10] and market abuse,[11] for example—applying to both segments without delineation. In addition, securitised derivatives are offered to the public and admitted for listing on terms stipulated by the FCA from time to time.[12]

In sharp contrast, the definitional approach adopted by Nigerian law reveals that there is a regulatory fracture from which regulatory arbitrage can be exploited. Specifically, while rule 7 of the *SEC Derivatives and CCP Rules* specifies the terms under which entities are to trade and clear ETDs, this study finds that "person", a very broad concept, is able to enter into OTC bilateral derivative transactions given the definition of the term in section 718 of the CAMA 2020. In particular, the concept of "person" is so broad that it even extends to 'partnerships'. Rule 7 of the *SEC Derivatives and CCP Rules* was of course designed to cover companies, not partnerships. In Nigeria, partnerships are a recent introduction under federal law. The regulatory scheme applicable to them is not especially extensive, with these entities expected to file reports only to the CAC and the FIRS. Given this, it is very easy to see how regulated entities such as banks and investment houses which might wish to move some transactions away from their balance-sheets can promote SPVs organised as partnerships to do so, thereby limiting the visibility of relevant financial market regulators, such as the CBN and the SEC. This kind of regulatory arbitrage could have been addressed by adopting EMIR's approach of creating specific registration requirements which would apply differently to market participants depending on their categorisation under regulation as either as 'financial counterparties' or 'non-financial counterparties'. It should be noted too that it remains unclear whether the registration requirements contained in the ISA 2007 which apply to "securities" offered for sale on a securities exchange registered by the SEC will apply to "derivatives" too, since they are "securities", as defined in the ISA 2007,[13] in which case this may serve to disincentivise participation in the derivatives market (at least the exchange-traded segment).

5.2.2.2. Institutional Structure of Derivatives Regulation

The institutional structure of financial regulation in the UK changed dramatically after the GFC. From an integrated regulatory framework, where (a) consumer protection regulation, rule making, supervision, and enforcement of prudential and conduct of business, and (b) regulation of the banking, securities, asset/investment management, and insurance industries all sat with one agency,

[10] Section 397 of the FSMA.
[11] Section 118 of the FSMA.
[12] See "Chapter 19: Securitised Derivatives: Standard Listing", available at: <https://www.handbook.fca.org.uk/handbook/LR/19.pdf>.
[13] The *SEC Derivatives and CCP Rules* are silent on this point.

the FSA,[14] there are now two principal agencies in the regulatory architecture, the PRA and the FCA, operating under the so-called twin peaks regulatory model.[15]

On one side of the spectrum, the PRA, which sits in the BOE,[16] is the prudential regulator in the UK, exercising regulatory purview over around 1,500 financial entities in the UK, including banks, building societies, credit unions, insurers, and major investment firms. The PRA's general objective is "promoting the safety and soundness of PRA-authorised persons"[17] while also "contributing to the securing of an appropriate degree of protection for those who are or may become policyholders".[18] The UK Treasury is also able to articulate and add objectives to the PRA's focus from time to time.[19] The PRA focuses on enhancing the stability of the UK financial system, doing this with its statutory *Threshold Conditions*,[20] which outline minimum requirements that firms must meet in order to be permitted to carry on the regulated activities in which they engage. The *Threshold Conditions* are designed to promote systemic safety and soundness and are integral to the operation of the PRA's regulatory regime. On the other side of the spectrum, the FCA is the conduct regulator for around 60,000 financial services firms in the UK and the prudential supervisor for 49,000 entities, setting specific standards for 19,000 entities.[21] The strategic function of the FCA is ensuring that the financial markets in general "function well",[22] while its operational objectives cover functions such as consumer protection,[23] protection and enhancement of the integrity of the UK financial system,[24] and promotion of effective competition in the interest of consumers in the financial markets.[25] By and large, the FCA's statutory *Threshold Conditions* are similar to the PRA's.

Comparison

[14] Dan Awrey, 'The FSA, Integrated Regulation, and the Curious Case of OTC Derivatives' [2010] 13(1) University of Pennsylvania Journal of Business Law 1-58.
[15] Michael Taylor, '"Twins Peaks": A Regulatory Structure for the New Century' [1995] 20 Centre for the Study of Financial Regulation; Michael Taylor, 'Regulatory Reform in the UK' [2013] 18(1) North Carolina Banking Institute 227-250.
[16] Section 2A of the FSMA. The BOE's powers are exercised by the BOE acting through its Prudential Regulation Committee.
[17] Section 2B of the FSMA.
[18] Section 2C of the FSMA.
[19] Section 2D of the FSMA.
[20] The PRA's Threshold Conditions focus on legal status, location of offices, prudent conduct of business, suitability, and effective supervision.
[21] See "About Us", available at: <https://www.fca.org.uk/about>.
[22] Section 1B of the FSMA.
[23] Section 1C of the FSMA.
[24] Section 1D of the FSMA.
[25] Section 1E of the FSMA.

When it comes to derivatives specifically, regulated market participants in the UK are dual regulated in that they are supervised by the PRA to the extent that it is a prudential matter and by the FCA to the extent that it is a conduct matter. The FCA also performs functions previously carried out by the FSA as UK Listing Authority, which is relevant for securitised derivatives. A market participant's scope of permission would be set out in the 'Financial Services Register', which is maintained by the FCA.[26] This register evidences a market participant's ability to deal as principal with options, futures, and contracts for differences.

Compared with the UK, the Nigerian institutional structure reveals a plethora of financial services regulators, which have been touched on above.[27] As far as the derivatives market is concerned, though, the CBN exercises oversight over foreign exchange derivatives (by virtue of the FEMM Act) while the SEC exercises oversight over securities/investment regulation and non-foreign exchange derivatives being that they are defined as "securities" under the ISA. In addition, notably, the SEC exercises oversight over critical elements of the infrastructure value-chain, the most important being trading venues and clearing entities. The structural boundaries between the SEC and the CBN created by this definitional conflation mean that no register (similar to the FCA's Financial Services Register) exists in Nigeria, either with the CBN or the SEC. Even if one registered with either regulator, information flows between both regulators which is required to enhance effective regulation, would be fragmented by these structural boundaries.

Jurisdictional and regulatory conflict. Comparatively, examining the regulatory design in the UK and Nigeria, the first observation that comes to mind given how the FSMA defines 'derivatives' and then allocates regulatory purview to the FCA and the PRA on the basis of *regulatory objective/outcome*, as opposed to the *type* of derivative product is that there is no discernible jurisdictional or regulatory conflict between the regulators, as is the case in Nigeria between the CBN (over foreign exchange derivatives) and the SEC (over non-foreign exchange derivatives).[28]

Added to this, any misapprehension as to regulatory remit between the FCA and the PRA is clarified in a memorandum of understanding (MOU) between both agencies which has been presented to Parliament pursuant to the FSMA.[29] The MOU sets out the framework both entities are to employ in cooperating with one another in relation to the supervision of markets and market infrastructure. It also provides for information sharing, rule making approach, among other things. A country like

[26] See "Financial Services Register", available at: <https://www.fca.org.uk/firms/financial-services-register>.
[27] See chapter 1 at 1.9.2.
[28] See chapter 3 at 3.2.2. for details of this conflict.
[29] See "Financial Services and Markets Act 2000: Memorandum of Understanding between the Financial Conduct Authority and the Bank of England, including the Prudential Regulation Authority", available at: <https://www.bankofengland.co.uk/>

Nigeria, with limited resources and technical capacity, can ill-afford jurisdictional or regulatory conflict between its financial services regulators, from an efficiency and cost perspective and from a market development perspective.[30]

Helpfully, the jurisdictional turf wars between the US CFTC and the US SEC offer a useful comparative learning point for Nigeria on this matter too. Created in 1974 by the *Commodity Futures Trading Commission Act*, the principal objective of US lawmakers in establishing the US CFTC was to create a regulatory agency to regulate futures and commodity options markets. It was the intention for this agency to be similar to the US SEC, an agency earlier created in 1934 by the *Exchange Act* to regulate the trading of securities in the secondary market. Like Nigeria, the *Exchange Act* is only activated, in part, where a financial instrument meets the definition of 'security' under US law.[31] While it is the case that unlike in Nigeria, a 'derivative' is neither defined nor described as being a 'security' in the US,[32] the jurisdictional conflict between both regulatory agencies over OTC derivatives, which is fuelled by continuing product innovation, has long been[33]—and continues to remain[34]—a source of regulatory uncertainty for market participants.

Evidence from the US suggests that these sorts of jurisdictional turf wars, in addition to engendering regulatory uncertainty, can stifle financial innovation and financial markets development.[35] Over the years, the regulatory system in the US has sought to deal with this jurisdictional conflict by enacting statutes clarifying the agencies' jurisdictional remits.[36] Both agencies have even attempted

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[30] This is even more so in the area of derivatives due to the complexity in this financial market segment.
[31] Section of the *US Securities Act 1933* defines a "security" as:

> "any note, stock, treasury stock, security future, bond, debenture, evidence of indebtedness, certificate of interest or participation in any profit-sharing agreement, collateral-trust certificate, pre-organization certificate or subscription, transferable share, investment contract, voting trust certificate, certificate of deposit for a security, fractional undivided interest in oil, gas, or other mineral rights, any put, call, straddle, option, or privilege on any security, certificate of deposit, or group or index of securities (including any interest therein or based on the value thereof), or any put, call, straddle, option, or privilege entered into on a national securities exchange relating to foreign currency, or, in general, any interest or instrument commonly known as a "security", or any certificate of interest or participation in, temporary or interim certificate for, receipt for, guarantee of, or warrant or right to subscribe to or purchase, any of the foregoing."

[32] *Reves v Ernst & Young* (1990) 494 US 56.
[33] Egon Guttman, 'The Futures Trading Act of 1978: The Reaffirmation of CFTC-SEC Coordinated Jurisdiction Over Security/Commodities' [1978] 28(1) American University Law Review 1-36.
[34] Michael Philipp and Ignacio Sandoval, 'CFTC/SEC Jurisdictional Battle Heats Up Over Dividend Indices' [2015] X(345) The National Law Review <https://www.natlawreview.com/article/cftcsec-jurisdictional-battle-heats-over-dividend-indices> accessed 10 December 2020.
[35] John Benson, 'Ending the Turf Wars: Support for a CFTC/SEC Consolidation' [1991] 36(5) Villanova Law Review 1175-1217.
[36] For example, the *Futures Trading Act of 1982*.

to coordinate, agree, and co-regulate the US derivatives markets.[37] Still, the conflict and duplication persists and calls continue to be made that both agencies should be merged.[38] The lesson to be drawn in designing the Nigerian derivatives framework is very simple: jurisdictional and regulatory conflict must be avoided at all costs. Therefore, the product and regulatory conflict between the CBN and SEC—which as of yet remains unpronounced in the Nigerian derivatives market[39]—is untenable on the medium to long term and must be cured. Research suggests that regulatory fragmentation leads to higher information costs for market participants, as they seek to ensure compliance with regulation.[40] Such a dynamic is untenable for financial market development and only serves to entrench the imperfections discussed in chapter 3.

Clarity of regulatory mandates. Compared to how the regulatory architecture is structured in the UK, from the perspective of clarity, this dissertation questions the suitability of the extant institutional regulatory design in Nigeria relative to its ability to support a (vibrant) derivatives market as envisioned by lawmakers and regulatory actors. Let us start with clarity of regulatory mandate. At a basic level, beyond the understanding that the CBN regulates deposit money banks while the SEC regulates securities dealing houses, to the extent that it concerns the derivatives markets, which regulator is responsible for what in the derivatives market should be thoroughly clear to market participants. Questions should not arise as to whether the SEC does indeed have the ability to regulate OTC FX futures, neither should questions arise as to whether bilateral OTC derivatives fall within the regulatory perimeter of the SEC, an entity which is supposed to have the ability to "maintain fair, efficient, and transparent markets".[41]

The absurdity of this legal uncertainty speaks to the larger issue of sub-optimal ordering which is predicated on the fact that Nigerian financial services regulators do not have appropriately defined objectives and mandates. In effecting financial (and derivatives) reform over time, legislative and regulatory actors have paid scant attention to the institutional structure in the country, not understanding that this is an important precondition to the successful achievement of the overall objectives of the regulatory regime. Legislation in Nigeria is often reactionary. Making matters worse, Nigerian regulatory actors too tend to stray outside their documented/statutory mandates. As discussed in chapter 3, the CBN has wilfully strayed beyond its regulatory purview time and

[37] For example, the Shad-Johnson Accord, an agreement reached by the chairmen of the US SEC and the CFTC to divide jurisdiction over options and futures on financial instruments in the US, which was subsequently ratified by legislation in the *Futures Trading Act of 1982*.
[38] See Benson (n 35).
[39] The jurisdictional conflict is unpronounced because the derivatives market in Nigeria is at a nascent stage.
[40] Awrey (n 14).
[41] See *Preamble* of ISA 2007.

time again, taking on functions or tasks well beyond its statutory remit.[42] In sharp contrast, the mandates of derivatives markets regulators in the UK are very clear (from a prudential and market conduct perspective).

Misallocation of regulatory capabilities. Comparing the UK and Nigeria further reveals another defect in the regulatory design in Nigeria, when it comes to the focus of Nigerian derivatives regulators. This dissertation will term this particular fracture 'misallocation of regulatory capabilities' as between the CBN and the SEC. This is a point which becomes more glaring when one notes that in the UK systemic prudential regulation is allocated to the PRA while conduct matters are allocated to the FCA. Without taking a view on how these two UK regulatory bodies are discharging their functions,[43] it is clear that the two functions (i.e., prudential supervision and market conduct) are allocated, theoretically, to statutory agencies best equipped, in either case, to discharge the aforementioned functions. *Why does this study take this view*? Because prudential regulation concerns managing risks within financial systems, risks which are more likely to emanate from deposit money banks, entities which come within the principal regulatory purview of deposit money banks (in the UK, being the BOE) while market conduct regulation (or prudential regulation of smaller financial market entities) can, in theory, sit with more specialist financial market regulators with capabilities in consumer protection and perhaps micro-prudential matters (in the UK, being the FCA).

In direct contrast to the UK, in Nigeria, there is strong evidence that capabilities are misallocated between the financial market regulators. To illustrate, the *Preamble* of ISA 2007 refers to the SEC as being empowered with the ability to "reduce systemic risk", a clear misapprehension. To start with, the SEC does not have regulatory visibility of key entities which might pose a systemic risk to the Nigerian financial system. Some of the more active deposit money banks which might pose a systemic risk to the financial markets, whether from a balance sheet/asset perspective or even from a transaction-specific perspective, have limited to no regulatory interface with the SEC. Think of an active merchant bank organised as a limited company engaging in an OTC bilateral derivative with a foreign entity. Added to this, given that the SEC has issued rules seeking to regulate ETDs and clearing entities, it is in order to raise questions, as this dissertation does, as to whether a regulator with such a disproportionate amount of experience in supervising equity markets focused on retail investors and thinly capitalised market intermediaries (who pose no systemic risk in the larger financial scheme) has the capacity to superintend exchange-traded markets populated mostly

[42] See Neil Munshi, 'Nigeria Central Bank Under Scrutiny Over Protests Crackdown' *Financial Times* (19 November 2020) <https://www.ft.com/content/aba78069-6e7d-4454-b570-e15cd408f821> accessed 10 December 2020.

[43] Getting involved in such a debate is outside the purview of this work.

by deposit money banks with larger balance sheets and more complex transactions principally supervised by the CBN. The view taken in this study, with respect of course, is that the SEC does not possess the ability to implement surveillance over these participants from a risk management and financial stability perspective.[44] Chapter 6 proposes suggestions to remedy these issues.

Further, as discussed in chapter 3,[45] the emerging linkage between FMDQ Clear Limited, which is the major clearing entity in the Nigerian financial market, and the banking system presents another regulatory blind spot. Were this clearing entity to run into financial difficulty, there could be an impact on the broader financial system for two reasons.[46] Firstly, the operations of CCPs in Nigeria are, at best, statutorily questionable, triggering concerns about legal certainty (for example, with multilateral netting).[47] Secondly, it is not at all clear that the clearing entities in Nigeria (FMDQ Clear Limited and NG Clearing Limited) are appropriately capitalised or that they are robustly supervised or even managed. In the case of NG Clearing Limited, it has even more limited links to the CBN because it is focused more on the equity derivatives spectrum of the market and the market participants here are thinly capitalised securities dealing firms, not deposit money banks (which the CBN pays attention to). Therefore, it is entirely conceivable that one or both of these clearing entities could run into trouble and require resolution. There is currently no contemplation as to what would happen in such a case within the Nigerian legal and regulatory framework. Similarly, there is no contemplation as to what the CBN might (have to) do in such a case.

5.2.2.3. Netting

Under UK law, netting arrangements are governed by three regulations: (1) rule 14.25 of the *Insolvency Rules 2016* (in circumstances where a netting arrangement fulfils the conditions of insolvency set-off); (2) the *Financial Collateral Arrangements (No 2) Regulations 2003* which implements the *Financial Collateral Arrangements Directive 2002/47/EC* ("**FCAR**") (in circumstances where netting arrangements have been entered into by counterparties as part of financial collateral arrangements); and (3) by the *Banking Act 2009* (in connection with all close-out netting arrangements, which have been entered into by a failing UK banking institution, whether governed by UK or foreign law).

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[44] IMF, Nigeria: Financial Sector Stability Assessment (May 2013) IMF Country Report No. 13/140 120 ("The SEC has not established any specific processes for the identification of systemic risk…. The SEC is planning to introduce a risk-based supervisory model, with systemic risk as one element to consider.")
[45] See chapter 3 at 3.3.6.
[46] In chapter 2, at 2.11, potential systemic risk posed by CCPs is examined.
[47] See chapter 3 at 3.2.3.

For insolvency set-off, rule 14.25 of the *Insolvency Rules 2016* provides that where, before a company goes into liquidation, and "there have been mutual dealings between the company and a creditor of the company … an account shall be taken of what is due from the company and the creditor to each other in respect of the mutual dealings and the sums due from one must be set off against the sums due from the other." The principles which apply to insolvency set-off were established in *MS Fashions Ltd v Bank of Credit and Commerce International SA (No.2) (BCCI No 2)*[48] and *Stein v Blake*, [49] which were handed down in relation to the erstwhile rule 4.90 of the *Insolvency Rules 1986*.[50] For insolvency set-off to take effect, a number of requirements have to be in place. The respective claims should be owed between the same parties and these parties must be acting in the same capacity. Also, the relevant transaction must have been entered into before the commencement of the winding-up. Added to this, claims in issue must be monetary in nature.

The FCAR operates in addition to rule 14.25 of the *Insolvency Rules 2016*. Regulations 10 and 11 of the FCAR prevent certain provisions of insolvency law from applying to financial collateral arrangements so that where such arrangements are entered into or collateral is provided under such arrangements in a prescribed period prior to the commencement of winding-up proceedings, the arrangement remains enforceable once winding-up commences unlike other agreements which the company may avoid. In addition, regulation 12 provides that a close-out netting provision in a financial collateral arrangement shall take effect in accordance with its terms even if a party to the arrangement is being wound-up or is subject to reorganisation proceedings provided that the other party to the arrangement was not aware nor should have been aware, at the time that it entered into the arrangement, that the party was subject to winding-up proceedings or reorganisation measures. The other party may also not enforce if it had actual notice of certain steps leading to such proceedings or measures at the time when it entered into the arrangement.

The *Banking Act 2009* (among other things) introduces the Special Resolution Regime (SRR) for dealing with banks and other firms in financial difficulties and gives the BOE statutory responsibility for systemically important inter-bank payment systems. Principally, there are three restrictions imposed on the BOE as resolution authority in the law in connection to netting arrangements which concern (1) suspension of the exercise of termination rights, (2) transfer of assets and (3) exercise of bail-in powers. Termination rights in netting arrangements are affected by section 48Z of the *Banking Act 2009* which provides that a crisis management measure or a crisis prevention measure should be disregarded in determining whether a default event provision in an agreement applies, provided that "the substantive obligations provided for in the contract or

[48] [1993] 3 All E.R. 769.
[49] [1996] 1 A.C. 243.
[50] See also *National Westminster Bank Ltd v Halesowen Presswork and Assemblies Ltd* [1972] A.C. 785.

agreement (including payment and delivery obligations and provision of collateral) continue to be performed". The impact of this provision is that while resolution measures going into effect will not be a basis for termination, still, termination (as a recourse) remains protected and can be enforced by a non-defaulting counterparty if the party under resolution is in breach of substantive obligations such as delivery and payment obligations and the provision of collateral. As for partial property transfers which can be disruptive to close-out netting and the single agreement concept, the *Banking Act 2009 (Restriction of Partial Property Transfers) Order 2009* obliges the BOE (as resolution authority) to transfer complete netting agreements as a whole. As for the BOE's bail-in powers, bail-in orders must ensure that creditors are not treated worse than they would have otherwise been in insolvency. Liabilities under derivative contracts are "protected liabilities",[51] which are preserved under bail-in orders which might be issued by the BOE to ensure that creditors are not treated worse than they would have been in insolvency. Where a protected liability relates to a derivative contract, it must be converted into a net debt, claim, or obligation before it can be bailed in. This may be done either in accordance with the relevant arrangement specified in the contract, or by special bail-in provision, which would allow the BOE to, for example, provide that a contract is closed out under the specified contract arrangement.

Comparison

Comparing UK law on the above to Nigerian law on the point, we see that section 33 of the *Bankruptcy Act 2004* sets out similar statutory set-off provisions to that which is contained in UK law under rule 14.25 of the *Insolvency Rules 2016*. Because Nigeria is itself a netting jurisdiction, however, there are limited learnings to take from this, other than the principles which the English cases referenced above lay out on the meaning and applicability of the statutory set-off provisions as they have yet to be tested in a Nigerian court.[52]

The difference between the FCAR and the CAMA 2020 on netting is quite stark, however: the Nigerian derivatives regulatory framework is missing key conceptual points like "market contracts", "market charge", and "market property", defined broadly, as contained under UK law, to cover margins connected to market contracts and default fund contributions to statutorily endorse multilateral CCP netting and settlement finality. In other words, unlike the regulatory framework in Nigeria, which provides statutory protection only for bilateral netting, the UK regulatory framework provides clear statutory protection for both bilateral netting and CCP multilateral netting.

[51] Section 4 of the *Banking Act 2009 (Restriction of Special Bail-in Provision, etc.) Order 2014*.

[52] For example, *MS Fashions Ltd* and *Stein* lay out three principles regulating insolvency set-off. These are the mandatory principle, the retroactivity principle, and the hindsight principle.

Still, perhaps the most crucial learning to take from UK law on netting is the SRR. For the avoidance of doubt, the CBN, as resolution authority in Nigeria, does have similar tools to those available to the BOE when it comes to dealing with banks in financial difficulties. Under the BOFIA 2020, the CBN has special intervention powers,[53] bail-in powers,[54] asset separation powers,[55] and sale of business powers.[56] What is different, however, is that apart from the netting protection outlined in the BOFIA 2020 (which have already been discussed in chapter 3), there remains a gap in that the sorts of specific restrictions imposed on the BOE as resolution authority in law in connection to netting arrangements which concern (1) suspension of the exercise of termination rights, (2) transfer of assets and (3) exercise of bail-in powers do not exist under Nigerian law in relation to the CBN. As a consequence, in a bank resolution scenario in Nigeria, because there are no similar restrictions on the CBN's powers, it is conceivable that the regulator could interfere with netting arrangements, disrupting, in particular, a non-defaulting party's termination rights and the single agreement principle.

5.2.3. Appurtenant Infrastructure

The following sub-sections sets out a comparative analysis of the regulatory framework on appurtenant infrastructure as between the UK and Nigeria as it relates to this work.

5.2.3.1. General Central Clearing Framework

Recognised clearing houses in the UK are regulated under Part 18 of the FSMA and are subject to the recognition requirement regulations contained in that law. They are obliged to comply with the provisions of the EMIR and other relevant rules issued by the BOE to achieve and maintain authorisation. An entity wishing to discharge the functions of a CCP in the UK can either (a) apply to the BOE to be 'authorised', or (b) apply to the BOE to be 'recognised'.[57] Such an entity must of course be a "body corporate or unincorporated association".[58] In any event, this work will not focus on authorisation requirements for CCPs in the UK. Instead, it shall focus (from a comparative perspective) on how CCPs are organised under UK law. In doing so, we shall employ the parameters developed in chapter 3.

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[53] Section 34 of the BOFIA 2020.
[54] Section 37 of the BOFIA 2020.
[55] Section 41 of the BOFIA 2020.
[56] Section 42 of the BOFIA 2020.
[57] See "Financial Market Infrastructure Supervision", available at: <https://www.bankofengland.co.uk/financial-stability/financial-market-infrastructure-supervision>.
[58] Section 288 of FSMA. There are three recognised CCPs in the UK, ICE Clear Europe Limited, LCH Limited, and LME Clear Limited.

5.2.3.2. Adequacy of Financial Resources

In the UK, a CCP is required to hold capital, including retained earnings and reserves, which is: (a) proportionate to the risk stemming from its activities, and (b) at all times sufficient to ensure an orderly winding-down or restructuring of the activities over an appropriate time span and an adequate protection of the CCP against credit, counterparty, market, operational, legal and business risks which are not already covered by margin, the default fund, the CCP's additional financial resources and the CCP's liquidity. Specifically, EMIR stipulates that a "CCP shall have a permanent and available initial capital of at least EUR 7.5 million to be authorised."[59]

In addition to the above, it is important to take note of *Commission Delegated Regulation (EU) No 152/2013* ("**152/2013**"), which supplements EMIR by providing regulatory technical standards on capital requirements which central counterparties have to abide by. In particular, article 1 of 152/2013 provides:

> "A CCP shall hold capital, including retained earnings and reserves, which shall be at all times more than or equal to the sum of:
>
> (a) the CCP's capital requirements for winding down or restructuring its activities calculated in accordance with Article 2 [of 152/2013];
> (b) the CCP's capital requirements for operational and legal risks calculated in accordance with Article 3 [of 152/2013];
> (c) the CCP's capital requirements for credit, counterparty and market risks calculated in accordance with Article 4 [of 152/2013];
> (d) the CCP's capital requirements for business risk calculated in accordance with Article 5 [of 152/2013].
>
> 2. A CCP shall have procedures in place to identify all sources of risks that may impact its on-going functions and shall consider the likelihood of potential adverse effects on its revenues or expenses and its level of capital.
>
> 3. If the amount of capital held by a CCP according to paragraph 1 is lower than 110 % of the capital requirements or lower than 110 % of EUR 7.5 million ('notification threshold'), the CCP shall immediately notify the competent authority and keep it updated at least weekly, until the amount of capital held by the CCP returns above the notification threshold.
>
> 4. That notification shall be made in writing and shall contain the following elements:
>
> (a) the reasons for the CCP's capital being below the notification threshold and a description of the short-term perspective of the CCP's financial situation;
>
> (b) a comprehensive description of the measures the CCP intends to adopt to ensure the on-going compliance with the capital requirements."

<u>*Comparison*</u>

[59] Article 16 of EMIR.

Comparing the approach UK law takes in relation to the adequacy or otherwise of a CCP's capital to Nigeria's, the key point which is apparent is: specificity, clarity, and rigour. Recall the point that was made in chapter 3 about rule 2, part b, of the *SEC Derivatives and CCP Rules* in Nigeria simply providing that a CCP must hold "evidence of minimum capitalisation of ₦5 billion". Contrast this with the UK regulatory framework, which takes a more systematic approach to risk management because it specifies that a CCP's capital on hand must not be less than capital which would be required to address (1) winding down or restructuring, (2) operational and legal risks, (3) credit, counterparty, and market risks, and (4) business risk. Notably, a methodology as to how all these risks are to be calculated at law is clearly outlined in 152/2013.

This means that, at least in theory, a UK CCP's entire risk matrix is readily ascertainable and quantifiable in monetary terms.[60] Principle 4 of the CPSS-IOSCO Principles outlines the expectation that a CCP should "maintain sufficient financial resources to cover its credit exposure to each participant fully with a high degree of confidence" and "a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would potentially cause the largest aggregate credit exposure to the CCP in extreme but plausible market conditions".

In contrast, because Nigeria's regulatory framework lacks the specificity which is existent in the UK on CCP capital requirement, this dissertation submits that one cannot be confident that clearing entities in Nigeria are able to effectively measure, monitor, and manage their credit exposures to participants and those arising from their payment, clearing, and settlement processes. There is simply no verifiable methodology to conclude otherwise. Also, no justification or methodology could be found in the course of the present research as to why/how the SEC settled on ₦5 billion. *Why might this be an issue*? Crucially, it triggers the question as to the practical and numerical utility of this figure in terms of assuring of CCPs' robustness in the Nigerian derivatives market. Without rigour, the number simply strikes as arbitrary. Indeed, simple reference to the capital requirement which the CBN requires of merchant and commercial banks (who are the clearing members within Nigeria's clearing entities) might have proved a constructive starting point. Under CBN regulations, a merchant bank is required to maintain a minimum paid-up share capital of ₦15 billion, while a regional commercial bank is required to maintain a minimum paid-up share capital of ₦10 billion, a national commercial bank is required to maintain a minimum paid-up share capital of ₦25 billion, and an international commercial bank is required to maintain a minimum paid-up

[60] See Paul Nahai-Williamson, Tomohiro Ota, Mathieu Vital and Anne Wetherilt, Central Counterparties and their Financial Resources – A Numerical Approach (BOE Financial Stability Paper No 19 April 2013).

share capital of ₦50 billion.[61] Given the scale of counterparty obligations these entities can conceivably create in derivatives markets, it is respectfully submitted that ₦5 billion may not be an adequate starting point.[62]

5.2.3.3. Default Management, Collateral Arrangements, and Other CCP Procedures

Recall the conclusion reached in chapter 3 in relation to member default management in the OTC FX futures market that the event of default provisions which gird the OTC FX futures have no basis, whether statutory or contractual, and some of the key protections they purport to offer are unimplementable. We shall now test this finding comparatively against UK law on CCP member default management.

The first relevant regulation in the UK is Part VII of the *Companies Act 1989* ("**Part VII**"). This regulation modifies UK insolvency law to protect the actions of clearing entities by providing derogations and carve outs from certain provisions of insolvency law which might conflict with the actions taken by clearing entities under their default management rules. Specifically, Part VII exempts market contracts, transfer orders, and the default rules of recognised clearing houses (amongst other things) from the general insolvency regime.[63] Specific statutory protection is provided for all the components, players, and pillars in the central clearing value chain in the UK derivatives regulatory framework. To illustrate, "market contracts" are defined to include contracts between clearing entities and their members,[64] a "market charge" is defined as a "charge, whether fixed or floating, granted … in favour of a recognised clearing house, for the purpose of securing debts or liabilities arising in connection with their ensuring the performance of market contracts",[65] while "market property" is defined broadly to cover margins connected to market contracts and default fund contributions.[66]

Added to this, CCPs in the UK are 'designated' under the *Financial Markets and Insolvency (Settlement Finality) Regulations 1999* ("**SFR**"),[67] which implements the *Settlement Finality Directive 1998/26/EC*), providing additional statutory certainty. The SFR applies to designated clearing systems and operationalises the EMIR requirement that all authorised CCPs must be

[61] See "CBN Supervision Circulars and Guidelines", available at: <https://www.cbn.gov.ng/documents/bsdcirculars.asp>.
[62] Crucial to note that this capital requirement issue is one which might not have arisen where the registration and licencing prerogative sat with the CBN as opposed to the SEC.
[63] Section 159 of Part VII.
[64] Section 155 of Part VII.
[65] Section 173 of Part VII.
[66] Section 177 of Part VII.
[67] Regulation 3 of the SFR.

designated as a 'system' for the purpose of the SFR. Designation determines and protects the point at which transfer orders within central clearing systems become irrevocable, ensuring that such transfers are not susceptible to challenge by a liquidator in the event of a member's insolvency (i.e., settlement finality). The third regulation is the FCAR discussed in chapter 3,[68] which seeks to harmonise rules for the creation, perfection, and enforcement of financial collateral across the EU and increase legal certainty about these kinds of financial arrangements.[69] In addition to providing that CCPs may apply close-out netting against a defaulting member irrespective of any moratorium that would otherwise be applicable in an administration or insolvency,[70] it also specifies that the only perfection requirement imposable in respect of financial collateral should be that the financial collateral is delivered, transferred, held, registered or otherwise designated so as to be in the possession or under the control of the collateral taker or of a person acting on the collateral taker's behalf while not excluding collateral techniques where the collateral provider is allowed to substitute collateral.[71]

Comparison

A comparative examination of the UK regulatory design as it relates to CCPs shows the glaring gaps which persist in the Nigerian regime despite recent reform. Gaps exists under Nigerian law with respect to virtually every single regulatory imperative discussed above (such as, default management, collateral arrangements, and multilateral CCP netting). Because these issues have already been explored extensively elsewhere in this work, they shall not be repeated at this point, but three points bear reiteration for maximum emphasis.

First, under extant derivatives regulation in Nigeria, unlike in the UK, CCP default management rules which underpin the nation's flagship OTC FX futures (and indeed the entire derivatives) market are, at best, vague and unimplementable. Second, settlement finality remains an open question due to lawmakers' omission to address multilateral netting and construct statutory endorsement for CCP operations. The view taken in this study is that these provisions could have been set out in the CAMA 2020, so, in particular, this is a lost opportunity. Third, the ability of a clearing entity to realise collateral remains cumbersome/unclear due to the failure to properly reform the security taking regime. The Nigerian derivatives regulatory framework is missing key conceptual points like "market contracts", "market charge", and "market property", defined broadly, as are contained in UK law, to cover margins connected to market contracts and default fund

[68] See chapter 3 at 3.3.5.
[69] Regulations 4 of the FCAR.
[70] Regulation 12 of the FCAR.
[71] Regulations 4, 5, 6, and 7 of the FCAR.

contributions. Reform on this too could have been set out in the CAMA 2020. In short, in sharp contrast to the UK, specific statutory protection does not exist for the key components, participants, and pillars in the central clearing value chain under Nigerian law.

5.2.3.4. CCP Recovery and Resolution

Even though EMIR does not outline requirements for CCPs to develop recovery plans, in September 2014, in its guidelines on the implementation of the *Principles for Financial Market Infrastructures*, ESMA made clear to European financial market regulators (including the BOE) that there was an expectation that this should be done. The guidelines provide:

> "When carrying out the duties resulting from EMIR for the authorisation and supervision of CCPs, competent authorities should ensure that CCPs established in their territory comply with these requirements in accordance with the PFMIs and operate in a manner that is consistent with them."[72]

It is not an exaggeration to submit that Europe (and by extension the UK) takes risks posed to a CCP very seriously. The European Commission has noted that among FMIs, "CCPs are exposed to the greatest variety of risks that could threaten their viability... The risks of a CCP becoming insolvent stem mainly from [a] the potential default of a clearing member, [b] potential losses on the CCP investment portfolio, or other [c] business risk."[73] Compounding this, the regulatory view in Europe is that general insolvency law is insufficient to address the failure of a systemic CCP because basic insolvency procedures are disruptive and ill-suited to serve the public utility role that CCPs discharge.[74] These are the same risks which FMDQ Clear Limited and NG Clearing Limited face in the Nigerian derivatives market. This dissertation would submit that they are even more acute in Nigeria because of the gaps prevalent in the underpinning appurtenant infrastructure detailed numerously in this work.[75] It is unrealistic to subject a failing CCP to the insolvency or administration regime contained in the CAMA 2020. A CCP is not a simple body corporate carrying on business and as argued in chapter 3,[76] this is a regulatory blind spot.

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[72] ESMA, *Guidelines and Recommendations regarding the implementation of the CPSS-IOSCO Principles for Financial Market Infrastructures in respect of Central Counterparties* (2104) ESMA/2014/1133 <https://www.esma.europa.eu/sites/default/files/library/2015/11/2014-1133_en.pdf>.

[73] European Commission, *Consultation on a Possible Recovery and Resolution Framework For Financial Institutions Other Than Banks* (2012) <https://ec.europa.eu/finance/consultations/2012/nonbanks/docs/consultation-document_en.pdf>.

[74] Ibid at 9 ("Being oriented towards satisfying creditors, it is not ideally suited for preserving financial stability in the (usually) short timeframe available. Franchise value of an entity can also be needlessly destroyed.")

[75] See, for example, chapter 3 at 3.3.

[76] Ibid.

Europe (and the UK) is constructing a robust framework to deal with these issues with a specific regulation.[77] The framework has three major elements: (a) preventative measures; (b) early supervisory intervention; and (c) resolution measures.[78] In summary, the EU CCP Resolution Framework requires member states to designate one or more resolution authorities with the power (in the UK, this will of course be the BOE) to use the resolution tools and exercise the resolution powers set out in the regulation.[79] Further, EU CCPs are required to prepare recovery plans outlining measures to be taken in the case of default and non-default events to restore their financial soundness, without any public financial support, allowing them to continue providing critical functions following a significant deterioration of their financial situation or a risk of breaching their capital and prudential requirements under EMIR.[80] These recovery plans must comply with the requirements in section A of the annex to the regulation, which lists the items that must be included in each recovery plan as a minimum. Among other things, the plans should include a framework of indicators that identify the circumstances under which measures in the recovery plan are to be taken.[81] Added to this, resolution authorities such as the BOE are required to prepare resolution plans for how a CCP would be restructured and its critical functions preserved if a CCP were to fail.[82] They also have powers to intervene in the operations of a CCP where the CCP's viability is at risk but before it reaches the point of failure or where its actions may be detrimental for financial stability.[83] As to resolution tools, a regulatory actor has a wide array of powers, such as: (1) position allocation tool;[84] (2) loss allocation tool;[85] (3) write-down and conversion of capital and debt instruments or other unsecured liabilities tool;[86] (4) sale of business tool;[87] (5) bridge CCP tool;[88] (6) public equity support tool;[89] and (7) temporary public ownership tool.[90] Resolution powers are also extensive, including, among others,[91] (1) appointing a special manager to replace the board of

[77] *Proposal for a regulation of the European Parliament and of the Council on a framework for the recovery and resolution of central counterparties and amending Regulations* (EU) No 1095/2010, (EU) No 648/2012, and (EU) 2015/2365 (COM(2016)0856 – C8-0484/2016 – 2016/0365(COD)) <https://data.consilium.europa.eu/doc/document/ST-10341-2020-INIT/en/pdf> ("**EU CCP Resolution Framework**"). As at the time of writing, the Council of the EU and the European Parliament had achieved political agreement on the regulation. The new framework will start applying 18 months after the date of entry into force of the regulation, meaning that if published in the Official Journal of the EU in December 2020, it will apply from June 2022.
[78] Ibid.
[79] Article 3 of the EU CCP Resolution Framework.
[80] Article 9 of the EU CCP Resolution Framework.
[81] Article 9(2) of the EU CCP Resolution Framework.
[82] Article 13 of the EU CCP Resolution Framework.
[83] Article 19 of the EU CCP Resolution Framework.
[84] Article 28 and 29 of the EU CCP Resolution Framework.
[85] Articles 28, 30, and 31 of the EU CCP Resolution Framework.
[86] Article 32 to 49 of the EU CCP Resolution Framework.
[87] Articles 40 and 41 of the EU CCP Resolution Framework.
[88] Articles 42 and 43 of the EU CCP Resolution Framework.
[89] Articles 46 of the EU CCP Resolution Framework.
[90] Articles 47 of the EU CCP Resolution Framework.
[91] Article 38 to 59 of the EU CCP Resolution Framework.

the CCP; (2) requiring the CCP to provide services or facilities that are necessary to enable a purchaser or bridge CCP to operate the business transferred to it; (3) suspending payment or delivery obligations of both counterparties to any contract entered into by a CCP under resolution; and (4) exercising control over a CCP under resolution.

Comparison

In sharp contrast to the EU (and UK), these matters remain entirely unaddressed in Nigeria.[92] To start with, the only mechanism currently in existence designed to tackle risk in derivatives markets in Nigeria is default funds and margins.[93] Setting aside the legal problems already identified by this dissertation with collateral and taking security in Nigeria, the reality is that in extremely volatile market conditions, the value of collateral could decline sharply, become illiquid, and thus leave a CCP unable to absorb losses, or the amounts held by way of margin might be insufficient to cover the losses of a member's default. To put it starkly, this dissertation submits that the consequences to the Nigerian financial markets, were the major clearing entity in Nigeria, FMDQ Clear Limited, to become insolvent, against the backdrop of the infrastructure gaps found in this research, is actually unimaginable. A particularly litigious market, the posture which creditors and shareholders would assume in such a scenario would precipitate indescribable chaos. Amazingly, the prospect of such an occurrence is entirely conceivable, rendering even more dramatic the defective transnational flow of recent reform into Nigerian derivatives law.[94]

It is submitted that authorities in Nigeria are not equipped with tools to prevent the systemic damage which could follow the disorderly failure of its clearing entities, especially FMDQ Clear Limited (given the emerging linkage between this particular clearing entity and the broader banking system). This dissertation contends, therefore, that there is a pressing need for a statutory regime to be constructed with preventative, early supervisory intervention, and resolution provisions built therein for clearing entities in Nigeria. And given that liquidity support might be required by CCPs from the CBN in a crisis scenario, it is submitted that such a statutory regime should contemplate a function within the CBN exerting regulatory purview over Nigerian clearing entities.[95] Such reform will also need to clarify the improperly ordered institutional design discussed above. With

[92] To some extent, this might be due to the level of understanding of the product and its dynamics, a point discussed in chapter 4 at 4.6.
[93] See "FMDQ *OTC Foreign Exchange Futures Market Framework*" (August 2019) available at: <https://www.fmdqgroup.com/wp-content/uploads/2019/08/OTC-FX-Foreign-Exchange-Futures-Market-Framework.pdf>.
[94] See chapter 4 generally.
[95] In the UK, the BOE can extend liquidity support to CCPs. See BOE, Sterling Monetary Framework Annual Report 2014–15 (June 2015) available at: <https://www.bankofengland.co.uk/-/media/boe/files/sterling-monetary-framework/annual-report-2014-15.pdf>.

CCPs currently sitting under the regulatory purview of the SEC, it is a virtual certainty that regulatory visibility and surveillance over these clearing entities' activities is sub-optimal.

5.3. South Africa

South Africa presents an interesting comparator jurisdiction to Nigeria, as it is sub-Saharan Africa's largest economy in terms of GDP and its most industrialised. (Nigeria's economy is, however, larger in purchasing-power parity terms).[96] In addition, when compared to Nigeria, South Africa presents deeper and more liquid financial markets[97] and a more active derivatives market.[98] It therefore clearly holds some lessons for Nigeria.

South African banks, like their Nigerian counterparts, employ OTC derivatives as a tool to speculate on exchange rates and interest rates and to hedge their own risks and their clients' risks. Other financial institutions, such as pension and insurance funds, asset managers and corporate treasurers use OTC derivatives predominantly to hedge against unwanted price movements and to reduce cash flow volatility.[99] Being an emerging market economy just like Nigeria, it is undoubtedly useful to examine legal steps (legislation and jurisprudence) which South Africa has taken different to Nigeria which has enabled it to build a more vibrant derivatives market, considering that both countries are contextually and situationally proximate.

5.3.1. Overview of Derivatives Framework

In South Africa, the principal regulations relevant to derivatives are as follows: (1) *Financial Sector Regulation Act 2017* ("**FSRA**"); (2) *Banks Act 1990*; (3) *National Payments Systems Act 1998*; (4) *Consumer Protection Act 2008*; and (5) *Financial Markets Act 2012* ("**SA FMA**"). Also critical are the Financial Market Regulations made pursuant to the SA FMA which entered into force on 9 February 2018 ("**SA FMA Regulations**").

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[96] Joseph Cotterill, 'South Africa's Economic Growth Stutters' *Financial Times* (Johannesburg 5 March 2019) <https://www.ft.com/content/1688aa70-3f53-11e9-b896-fe36ec32aece> accessed 6 May 2019.
[97] See Official Monetary and Financial Institutions Forum, *Absa Africa Financial Markets Index* (2018) <https://www.omfif.org/media/5396362/absa-africa-financial-markets-index-2018.pdf> 7 accessed 6 May 2019.
[98] See Audrey Nguema Bekale, Erika Botha, and Jacobus Vermeulen, 'Institutionalisation of Derivatives Trading and Economic Growth: Evidence from South Africa' [2015] Economic Research Southern Africa ERSA Working Paper 505 3.
[99] IMF, *South Africa: Financial Sector Assessment Program – Reforms in the OTC Derivatives Market* (February 2015) 12.

The most relevant of the above-mentioned laws, the SA FMA, provides for the regulation and supervision of the South African derivatives (and financial) markets and related market infrastructures, such as clearing houses and trade repositories. It also outlines extensive provisions aimed at the reduction of systemic risk, the protection of regulated persons, clients and investors and the promotion of fair, efficient, and transparent financial markets.

Unlike Nigeria, South Africa is a G20 nation; therefore, it is bound by the Pittsburgh Summit commitments. While some progress has been made as it relates to the finalisation of margin requirements for non-centrally cleared derivatives, draft rules for equivalence recognition of foreign central clearing counterparties, and the development of a framework for trade reporting and trade repositories, overall implementation of the G20 commitments remain work-in-progress in South Africa.[100]

5.3.2. Law and Regulation

The following sub-sections sets out a comparative analysis of relevant law and regulation as between South Africa and Nigeria as it relates to this work.

5.3.2.1. Definitional Foundations

In defining 'derivatives', South Africa adopts an approach similar to Nigeria, in that it cross-references both 'securities' and 'derivatives'.[101] Section 1 of the SA FMA sets out a list of financial instruments which are regarded as "securities" under South African law and 'derivative instruments' is one of these.[102] The section then goes on to define "derivative instruments" as "any (a) financial instrument or (b) contract that creates rights and obligations and whose value depends on or is derived from the value of one or more underlying asset, rate or index, on a measure of economic value or on a default event".

Comparison

In comparing the approaches both jurisdictions take to the definition of 'derivatives', at first glance, while one might be led to conclude that South Africa conflates both financial instruments in cross-referencing them, the SA FMA takes care to carve out derivatives from specific regulatory

[100] See in general IMF at n 99.
[101] See chapter 3 at 3.2.1.
[102] Other financial instruments enumerated as 'securities' under South African law in section 1 of the SA FMA (among others) are 'shares', 'depository receipts', 'other equivalent equities in public companies', 'debentures', 'bonds', 'notes', and 'participatory interests in a collective investment scheme'.

provisions which apply to *traditional* securities. Recall that this was a fracture in Nigerian law identified in chapter 3. Let us look, in addition, to how the South African law defines "settle". Section 1 of the SA FMA provides:

> ""Settle" means (a) in respect of listed securities, *other than listed derivative instruments*, the completion of a transaction by effecting the transfer of a security in the relevant uncertified securities registers and the payment of funds or any other consideration payable in respect of that transaction, through a settlement system as defined in the rules; or (b) in respect of a listed derivative instrument, the completion of a transaction by the fulfilment of all contractual obligations associated with the resultant position in the derivative instrument in accordance with the rules …" (*emphases added*).

In sharp contrast to Nigerian law, by taking this intricate definitional approach, South African law addresses the questions this dissertation finds remain open as to the applicability, or otherwise, of securities-related doctrines to derivatives when they are defined as securities.[103] What this further means is that under South African law, listed derivatives are treated just as listed securities are, to the extent that there is no specific carve out.[104]

Added to this, one must pay attention to the additional derivatives regulations which are outlined in the SA FMA Regulations. The SA FMA Regulations sets out extensive provisions on requirements for the regulation of OTC derivatives, external central securities depositories links, assets and resources requirements for market infrastructures, and CCPs. This regulation is aimed at regulation of the OTC derivatives market segment, setting out provisions covering 'OTC derivative providers' (OTDPs) which are defined as "[persons] who as a regular feature of its business and transacting as principal (a) originates, issues or sells OTC derivatives; or (b) makes a market in OTC derivatives".[105] Research indicates most South African banks and foreign banks operating in South Africa would qualify as OTDPs.[106] Even though the Nigerian equivalent of this category would be deposit money banks, no equivalent regulatory framework has been issued in Nigeria in this respect. Inferably, this is currently the case because regulators in Nigeria have yet to engage with the definitional nature of this financial instrument.

Separate from the fact that this regulation provides further definitional clarity as to what a 'derivative' is under South African law by setting out a distinct definition for "OTC derivative" in

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[103] See chapter 3 at 3.2.1.

[104] Note that this comports with the treatment in the UK as well, where securitised derivatives are offered to the public and admitted for listing on terms stipulated by the FCA (separate to the regime which applies to OTC derivatives). This is an important point because the regulatory disposition to OTC derivatives has to be different to ETDs.

[105] Section 1 of the SA FMA Regulations.

[106] Dawid de Villiers, Denisha Govender, and Eric Madumo, Banking Regulation in South Africa 2020 (Global Legal Insights) <https://www.globallegalinsights.com/practice-areas/banking-and-finance-laws-and-regulations/south-africa> accessed 10 December 2020.

a subsidiary legislation (in addition to the definition contained in the SA FMA),[107] it is the fact that the South African financial regulatory system recognises the innovative and dynamic nature of the derivatives market by enabling the Minister of Finance issue regulations from time to time that is most notable.[108] In other words, it is recognised in South Africa that it is not possible to prescribe all financial regulatory imperatives in a statute, as remains unhelpfully the case in Nigeria with the ISA 2007. This is traceable to the fact that the SA FMA, like the UK FSMA, is a framework statute. In contrast, the ISA 2007 is very prescriptive, attempting to capture all imperatives in statute and therefore inelegant as far as derivatives regulation is concerned.

5.3.2.2. Institutional Structure of Derivatives Regulation

In terms of the institutional structure of financial regulation in South Africa, just as in the UK, there have been changes recently.[109] After the GFC, just like the UK, South Africa enacted the FSRA, which introduced the twin peaks model of financial regulation in the country with the core objectives of promoting and maintaining financial stability.[110] The reform saw the creation of a new prudential regulator, the Prudential Authority, tasked with overseeing the system wide safety and soundness of financial institutions, as well as a new market conduct regulator, the Financial Sector Conduct Authority, tasked with overseeing system wide efficiency and integrity of financial markets and affording greater financial consumer protection. The South African Reserve Bank (as central bank) now carries an express and enhanced financial stability mandate within this model of regulation by way of statutory objective.[111] South African financial institutions which engage in derivative transactions are, to this end, licenced and both regulated by the Prudential Authority and the Financial Sector Conduct Authority.

Comparison

When it comes to derivatives specifically, just like the UK, regulated market participants in the South Africa are dual regulated in that they are supervised by the Prudential Authority to the extent that it is a prudential matter and by the Financial Sector Conduct Authority to the extent that it is a market conduct matter. Therefore, all the analysis set out above (in relation to the UK) also apply

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[107] Section 1 of the SA FMA Regulations defines an "OTC derivative" as "an unlisted derivative instrument that is executed, whether confirmed or not confirmed, excluding (a) foreign exchange spot contracts; and (b) physically-settled commodity derivatives".
[108] Section 5 of the SA FMA.
[109] See, in general, Andrew Schmulow, 'Financial Regulatory Governance in South Africa: The Move towards Twin Peaks' [2017] 25(3) African Journal of International and Comparative Law 393-417.
[110] Section 7 of the FSRA.
[111] Section 11 of the FSRA. See also Corlia Van Heerden and Gerda Van Niekerk, 'Twin Peaks in South Africa: A New Role for the Central Bank [2017] 11(4) Law and Financial Markets Review 154-162.

here and will, therefore, not be repeated. However, there are some important facts and structural features peculiar to the South African design which present useful learning points for Nigeria.

Firstly, one will observe that, at the most basic level (and historically), South Africa has reacted much more deliberately and purposefully to changing dynamics in its financial services compact, whereas Nigeria has not.[112] Indeed, this study finds that since obtaining independence from the UK, Nigeria has yet to conduct a purposeful, comprehensive examination of its financial regulatory system to determine if it is fit for purpose. For the avoidance of doubt, the view taken in this work is that it is not. It is important to bear in mind that before adopting the twin peaks financial regulatory model, South Africa (just like Nigeria) had practiced a sectoral and functional regulatory approach and itself had a web of financial sector regulators exerting purview over different financial market segments.[113] However, it soon became clear to relevant stakeholders in South Africa that such a fragmented structure was complex, ineffective, and very much open to regulatory arbitrage.[114] Reform of South African law means the kinds of regulatory or jurisdictional conflicts which exist in Nigeria (or in the US for that matter) are not existent within the South African derivatives regime. The important of this finding should not be lost on us as it reinforces the broader argument which is made in chapter 3 (and in this work in general) that the institutional regulatory design which exists in the financial (and derivatives) markets in Nigeria is sub-optimally ordered. This dissertation, therefore, echoes the calls which have been made that there is an urgent need for the Nigerian government to conduct a wholesale study of the local financial regulatory scheme in order to enhance the country's regulatory model as appropriate.[115]

Secondly, a key observation from South Africa is the very existence of the SA FMA Regulations and how it is legislatively linked to the FSRA and the SA FMA. As already mentioned above, in contrast to Nigeria, the South African derivatives regulatory design is more artfully constructed in that it anchors the subsequent issuance of a robust subsidiary derivatives regulation (which can be updated from time to time) (i.e., the SA FMA Regulations) within the structure of a broad framework statute (i.e., the SA FMA) which was enacted following the GFC.[116] As such, there can be no serious questioning of its permissibility and consistency with the peremptory provisions of

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[112] As noted in chapter 1, it has taken thirty years for the Nigerian legislature to review and make amendments to the *Companies and Allied Matters Act*.
[113] See National Treasury policy document 'A Safer Financial Sector to Serve South Africa Better' (2011) <http://www.treasury.gov.za/> accessed 3 January 2021.
[114] Ibid at 4.
[115] Folarin Akinbami and Franklin Ngwu, 'Overhauling the Institutional Structure of Financial Regulation in Nigeria: The Unfinished Reform' [2016] 17(4) Journal of Banking Regulation 311-331.
[116] The kind of statutory link which exists between the SA FMA and the SA FMA Regulations does not exist between the ISA 2007 and the *SEC Derivatives and CCP Rules*. In some ways, this is partly responsible for the structural and operational disconnect that exists between the ISA 2007 and the aforementioned subsidiary regulation.

principal statutes, as is the case in the *SEC Derivatives and CCP Rules* and the ISA 2007. Still, what is most striking is that these regulations, together, represent decisive attempts by South Africa[117] to implement some of the Pittsburgh Summit commitments.[118] In contrast, no similar regulatory steps have been taken in the development of financial regulation in Nigeria. Rather, enactment of financial reform has been piecemeal and reactionary, with financial services regulators acting in silos. This dissertation submits that if Nigeria is to construct a robust derivatives regulatory framework, as with South Africa, full implementation of relevant G20 commitments is an imperative.

5.3.2.3. Netting

Under South African law, (post-insolvency) netting arrangements are governed by provisions outlined in section 35 of the *Insolvency Act 1936* ("**IA**"). Section 35A(2) of the IA, which covers CCP multilateral netting, provides that "[if] upon the sequestration of the estate of a market participant the obligations of such market participant in respect of any transaction entered into prior to sequestration have not been fulfilled, the market infrastructure in respect of any obligation owed to it, or any other market participant in respect of obligations owed to such market participant, shall in accordance with the rules applicable to any such transaction be entitled to terminate transactions or revoke settlement instructions and the trustee of the insolvent estate of the market participant shall be bound by such termination or revocation". Section 35A(4) of the IA further goes on to confirm the statutory validity of market infrastructure rules "which provide for the netting of a market participant's position or for set-off in respect of transactions concluded by the market participant or for the opening or closing of a market participant's position or for the revocation of settlement instructions".

Bilateral netting, meanwhile, is covered by section 35B(1) of the IA, which provides that "notwithstanding any rule of the common law to the contrary, all unperformed obligations arising out of one or more master agreements between the parties, or obligations arising from such agreement or agreements in respect of assets in which ownership has been transferred as collateral security, shall, upon the sequestration of the estate of a party to such master agreement, terminate

[117] FSB, Press Release 'FSB Completes Peer Review of South Africa' (5 February 2013) <https://www.fsb.org/wp-content/uploads/pr_130205.pdf> accessed 3 January 2021 ("The authorities intend to mandate reporting of all OTC derivatives during 2013 and will initially rely on incentives to fulfil the G20 commitment on central clearing.")
[118] IOSCO, Implementation Report: G20/FSB Recommendations related to Securities Markets (November 2017) <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD585.pdf> accessed 3 January 2021 ("South Africa reports that substantial progress had been made via the enactment of the Financial Markets Act, which provides a legislative framework to enable regulators to implement the G20 recommendations to reform the OTC derivatives market.")

automatically at the date of sequestration, the values of those obligations shall be calculated at market value as at that date, the values so calculated shall be netted and the net amount shall be payable."

In terms of bank (and financial institution) resolution, as at the time of writing, South Africa was crafting a resolution framework,[119] which is to be based on the FSB's *Key Attributes of Effective Resolution Regimes for Financial Institutions*.[120] From all indications, this reform will be set out in the *Financial Sector Laws Amendment Bill* which, as of writing, is currently before the South African legislature.[121] In the meantime, troubled South African banks are resolved on terms outlined in sections 68 and 69 of the Banks Act 1990. The Prudential Authority is the relevant supervisory authority. Still, there is a crucial learning point for Nigeria here. Instead of the current situation where various sectoral regulators develop and implement resolution provisions in relation to their regulated entities, it ought to be considered whether this could be done on a consolidated basis, with one law setting out the relevant architecture (as is the intended approach in South Africa).

Comparison

Comparing South African law on netting to Nigerian law on the matter, the principal difference is readily apparent: unlike the regulatory framework in Nigeria, which provides statutory protection only for bilateral netting, the South African regulatory framework—just like the UK's—provides clear statutory protection for both bilateral netting and CCP multilateral netting. At the minimum, provisions modelled after section 35A of the IA, which defines "market infrastructure", "market participant", and "rules" on CCPs could have been inserted into the CAMA 2020 after the transplanted *2006 ISDA Model Netting* content, even though questions might arise as to the robustness of these provisions compared to more developed derivatives markets such as the UK.[122]

Finally, because a bank (and financial institution) resolution framework is currently being crafted in South Africa, there are limited learnings to highlight here as was the case with the UK. Indeed, it would appear that, currently, Nigeria does have a more sophisticated bank resolution framework relative to South Africa.[123]

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[119] See National Treasury policy document 'Strengthening South Africa's Resolution Framework for Financial Institutions' (2015) <http://www.treasury.gov.za/twinpeaks/Strengthening%20South%20Africa%E2%80%99s%20Resolution%20Framework%20for%20Financial%20Institutions.pdf > accessed 3 January 2021.
[120] IMF, *South Africa: Financial Sector Assessment Program – Financial Safety Net, Bank Resolution, and Crisis Management Framework* (March 2015).
[121] See "Financial Sector Laws Amendment Bill (B15-2020)", available at: <https://www.parliament.gov.za/bill/2292271>.
[122] Any such questions would not have reached the level of raising doubts as to legal certainty, however.
[123] Although, this is because the BOFIA 2020 just got amended.

5.3.3. Appurtenant Infrastructure

The following sub-sections sets out a comparative analysis of the regulatory framework on appurtenant infrastructure as between Nigeria and South Africa as it relates to this work.

5.3.3.1. General Central Clearing Framework

Clearing entities are provided for under section 1 of the SA FMA and are licenced under section 47 of the same law. The Financial Sector Conduct Authority is the relevant licencing authority for CCPs in South Africa;[124] although, it can only grant CCP licences with the "concurrence of the Prudential Authority and the South African Reserve Bank".[125] What is notable about this CCP authorisation approach (and is therefore a learning point for Nigeria) is that the principal financial services regulators in South Africa all have a say in the licencing (and indeed regulation) of CCPs, in sharp contrast to what exists in Nigeria where the SEC is the only authorising and regulating entity.[126]

5.3.3.2. Adequacy of Financial Resources

In South Africa, a CCP is required to "subject to the requirements prescribed by the Minister, have sufficient assets and resources, which resources include financial, management and human resources with appropriate experience, to perform its functions …"[127] Section 8 of the SA FMA Regulations supplements this provision by adding some objective standards by which adequate financial resources can be ascertained. It provides that a CCP must:

> "hold sufficient capital and liquid net assets funded by equity in the Republic –
>
> (i) to cover potential general business losses to ensure that the market infrastructure is adequately protected against operational, legal, custody and investment risks so that it can continue performing its functions and duties as a going concern;
> (ii) which should be determined by its general business risk profile and the length of time required to achieve an orderly winding-up or recovery, as appropriate, of the market infrastructure's critical operations and functions under a range of stress scenarios;
> (iii) which reflects a strong cash, cash-equivalent, or securities position to allow the market infrastructure to meet its current and projected operating expenses under a range of scenarios, provided that cash equivalents and securities consist of high-quality and sufficiently liquid assets that can easily be converted into cash at little or no loss of value, even in adverse market conditions;

[124] Section 1 of the SA FMA.
[125] Section 49(1A) of the SA FMA.
[126] The problems with this have already been discussed in this work.
[127] Section 48(1)(a) of the SA FMA. Section 49A of the SA FMA, notably, also outlines licencing requirements for external central counterparties from equivalent jurisdictions.

(iv) which, is at a minimum, equal to six months of operating expenses, provided that the market infrastructure considers whether resources are required beyond that amount, taking into account its general business risk profile; and
(v) which is permanently available for the market infrastructure to absorb operating expenses or losses on a going concern basis"

Comparison

When we compare the approach South African law takes in relation to the adequacy or otherwise of a CCP's capital to Nigeria's, as with the UK, some specificity and clarity is readily apparent. Admittedly, South Africa's regulatory approach on this is clearly not as rigorous as the UK (where clear methodology as to how all risks are to be calculated at law is unambiguously outlined in 152/2013). This notwithstanding, unlike rule 2, part b, of the *SEC Derivatives and CCP Rules* in Nigeria which simply stipulates that a CCP must hold "evidence of minimum capitalisation of ₦5 billion", there is evidence of a more systematic approach to the adequacy of capital as far as CCPs are concerned in South Africa. In sharp contrast, the Nigerian regulatory framework lacks similar specificity. Thus, as mentioned above, one cannot be confident that clearing entities in Nigeria are able to effectively measure, monitor, and manage their credit exposures to participants and those arising from their payment, clearing, and settlement processes.

5.3.3.3. Default Management, Collateral Arrangements, and Other CCP Procedures

As discussed in chapter 3, the absence of explicit statutory endorsement of CCPs' procedures, especially default management and collateral arrangements (particularly in an insolvency scenario), remain a principal fracture in the Nigerian derivatives regulatory regime. South Africa addresses these concerns directly in law. Section 35A(2) of the IA provides:

> "If upon the sequestration of the estate of a market participant the obligations of such market participant in respect of any transaction entered into prior to sequestration have not been fulfilled, the market infrastructure in respect of any obligation owed to it, or any other market participant in respect of obligations owed to such market participant, shall in accordance with the rules applicable to any such transaction be entitled to terminate transactions or revoke settlement instructions and the trustee of the insolvent estate of the market participant shall be bound by such termination or revocation."

Just as with UK law, key components in the central clearing value chain are afforded statutory protection at law to entrench legal certainty. The definition of "market infrastructure" is couched broadly enough to extend to CCPs, while "market participant" means an authorised user, a participant, a clearing member, or a client, and "rules" and "transactions" extend to those developed and effected on CCPs, respectively.[128]

[128] Section 35A(1) of the IA.

Comparison

A comparative examination of the South African regulatory design as it relates to CCPs' procedures reiterates the defects which exist in the Nigerian regime despite recent reform. The extractable lessons here are exactly the same as those which arise when we compared the Nigerian regime to the UK regime above, so they will not be repeated here.

5.3.3.4. CCP Recovery and Resolution

Under South African law, the Financial Sector Conduct Authority may, with the concurrence of the Prudential Authority and the South African Reserve Bank, suspend or revoke the license of a CCP and immediately transfer its business to a similar CCP, or apply to court for a winding up order against it, in the interests of clearing members, authorised uses or participants' members, or clients.[129] Recognising that this is insufficient, South Africa is in the process of developing a comprehensive resolution framework, which is to be based on the FSB's *Key Attributes of Effective Resolution Regimes for Financial Institutions*.[130] The National Treasury-issued policy document *Strengthening South Africa's Resolution Framework for Financial Institutions* outlines some of the jurisdiction's key priorities, which range from (among others) designating a resolution authority, to enshrining the obligation to develop resolution plans and resolvability assessments into law, and the creation of stabilisation powers, namely the ability to establish a bridge institution, to transfer assets and liabilities, and bail in powers.[131]

Comparison

Compared to the Nigerian derivatives regulatory regime, even though South Africa's CCP resolution regime is currently being drafted, there are still two very important learning points for Nigeria from available material on that jurisdiction's progress thus far.[132] The first is that resolution regimes should have clear statutory basis for absolute legal certainty. As noted above, from all indications, it is likely that this important South African reform will be set out in the *Financial*

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[129] Section 60 of the SA FMA.

[130] National Treasury policy document 'Strengthening South Africa's Resolution Framework for Financial Institutions' (2015) <http://www.treasury.gov.za/twinpeaks/Strengthening%20South%20Africa%E2%80%99s%20Resolution%20Framework%20for%20Financial%20Institutions.pdf > accessed 3 January 2021.

[131] François Groepe, Deputy Governor of the South African Reserve Bank, 'Strengthening South Africa's Resolution Framework for Financial Institutions' (speech at the public workshop on the discussion paper titled "Strengthening South Africa's Resolution Framework for Financial Institutions", Cape Town, 15 September 2015) <https://www.bis.org/review/r151021b.htm> accessed 26 December 2020.

[132] Ibid.

Sector Laws Amendment Bill which is currently before the South African legislature. In direct contrast, the CCP resolution provisions in Nigeria (which this work views as wholly inadequate) are set out in subsidiary regulation, leaving them open to legal challenge.[133] As highlighted in chapter 3, since the ISA 2007 neither defines a "central counterparty", nor sets out the specific functions that attach to a CCP, questions arise as to whether the *SEC Derivatives and CCP Rules* (on CCPs) are legally permissible and not inconsistent with the peremptory provisions of the ISA 2007. This dissertation takes the view, therefore, that it is important to clarify the legal status of CCPs within the Nigerian regulatory regime. Importantly, any CCP resolution framework will need to be set out in law. Otherwise, legal uncertainty will only persist. Further, it will be difficult to procure the compliance of key actors (such as the CBN, FIRS, or CAC) if what would be their obligations in such a scenario is not documented in statute. The second key lesson for Nigeria is that the resolution authority for systemically important financial institutions such as CCPs ought to maintain linkage with the reserve bank, specifically the CBN. In the case of South Africa, it will be the Prudential Authority, which is, of course, administered by the South African Reserve Bank.[134] A similar arrangement is what exists under UK law as well. There are crucial lessons for Nigeria here.

5.4. Conclusion

The question as to how the legal and regulatory framework as it applies to derivatives in Nigeria might be improved upon requires a predicate upon which the proposed reform points can be situated. This chapter has constructed that predicate by conducting a comparative examination of two comparator jurisdictions to generate useful learning points. The UK, a major financial hub and common law relation of Nigeria, presents useful learning points as to how a derivatives market should be regulated, particularly if such a market is attempting to leapfrog. From how the products should be defined in law, to the regulatory design and set-up which should overarch these products, and their participants, key lessons have been discussed in the present chapter. Similarly, South Africa too offers useful lessons which have been discussed in the present chapter. Because both Nigeria and South Africa are developing nations, there are especially useful lessons for regulatory stakeholders in Nigeria to consider when it comes to the institutional structure of financial regulation. It is instructive that in some cases, regulatory dynamics which exist in the UK exist in South Africa as well (for example, the twin peaks regulatory approach).[135] Similarly, it is also notable that some regulatory issues which Nigeria is currently grappling with do exist in South

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[133] Legal challenge is entirely conceivable by aggrieved creditors or shareholders in a resolution scenario under current terms in Nigeria, for example.
[134] Ibid.
[135] This, of course, validates the choice of the two comparator jurisdictions in this work.

Africa (for example, dealing robustly with resolution of financial institutions). All these lessons are conclusively restated and distilled into substantive and actionable reform proposals in chapter 6.

Chapter 6 — Curing the Gaps: Proposals for Reform

6.1. Introduction

This chapter concludes this work. In doing so, it sets out a conclusive restatement of the key arguments and principal findings made in this dissertation and then closes out by outlining reform proposals designed to cure the fractures identified in this research. This is the second and final instalment in the development of a response to the second question in this study: *how might the Nigerian derivatives regulatory framework be improved upon*? In outlining specific reform points to be considered for implementation, importantly, this chapter sets out a mechanism for executing the proposed reform points and discusses the broad contours to be borne in mind. It also suggests an area for further research, following findings in this work and intense engagement with the local financial regulatory scheme over the course of the research period.

6.2. Restatement of Principal Research Findings

Two questions were posed in the introductory chapter. *What is the existing legal and regulatory framework in Nigeria as it applies to derivatives*? *How might this framework be improved upon*? In tackling these questions, after having conceptualised the view of an optimally ordered derivatives regulatory framework with robust appurtenant infrastructure in chapter 1, chapter 2 and chapter 3 went on to, *inter alia*, provide insight into the lineaments of the derivatives regulatory framework in Nigeria. Against the backdrop of a technical exploration of these devices, the constitution of these products, their uses, and the surrounding framework integral to the optimal ordering of these products in the post GFC reform era, these chapters sought to deconstruct the legal and structural components and fissures existent within the Nigerian derivatives regulatory framework.[1]

Taking the enquiry further and leveraging on the conceptual tools of transplantation and transnationalisation, chapter 4 then went on to explain why the intended effects of recent reform in Nigeria will not be achieved under current terms. The chapter also mapped the transnational flow of derivatives reform into Nigerian law and then developed a theoretical argument as to what has informed reform in Nigeria before going on to theorise as to the causes of the failure of the transnational flow of reform into Nigerian law, supporting the core arguments made in the broader dissertation.

Following this, chapter 5 went on to compare and contrast the derivatives regulatory frameworks in the UK and South Africa with Nigeria's, with a view to extracting lessons, if any, for Nigeria.

[1] And to the extent relevant, the financial regulatory framework.

As documented in that chapter, there are some key learning points for Nigeria, which now leads to the salient question: *given all that has been found, how might the fissures identified in the Nigerian framework be cured in practice*? Outlining properly considered recommendations to this question is the purpose of this concluding chapter, which constitutes the second instalment in the development of a response to the second question posed above.[2] Before we proceed, however, it is vital to restate the principal research findings in this work for clarity and completeness.

6.2.1. Weak Statutory Firmament Supporting Derivatives Regulatory Framework

The first principal finding in this work is that the current patchwork of laws which together constitute the statutory firmament for the Nigerian derivatives regulatory framework is weak. This weakness is triggered by the fact that the principal law is outdated. While this much might have been apparent from the discussion in chapter 3, the weaknesses of the ISA 2007 as the principal law supposed to regulate the derivatives market do need to be emphasised. The law is desperately inadequate. Added to this, this study strongly questions the appropriateness of predicating a derivatives regulatory framework on a law broadly conceived to apply (originally) to securities markets. As was pointed out in chapter 3, one cannot situate a derivatives regulatory perimeter around a base intended for traditional securities because they are distinct and different types of financial instruments demanding distinct and different legal/regulatory approaches. The ISA 2007 does not robustly cover the regulatory perimeter of the Nigerian derivatives market.

This argument is further strengthened when we note that the ISA 2007 does not at all contemplate financial market infrastructures which have become more prominent in the post GFC reform era such as CCPs and trade repositories.[3] Indeed, the only type of clearing entity contemplated by the ISA 2007 is what is referred to in the law as "clearing and settlement company".[4] Added to this, it is not at all clear from an examination of the law that the SEC is empowered to issue regulations which currently covers CCPs, as has been done with the *SEC Derivatives and CCP Rules*. What is clear is that section 13(m) of the ISA 2007 empowers the SEC with the ability to "register and regulate securities depository companies, clearing and settlement companies, custodians of assets and securities, credit rating agencies and such other agencies and intermediaries", it is not clear that

[2] Chapter 5 represented the first instalment in developing a response to the second research question. The question being: *how might the Nigerian derivatives regulatory framework be improved upon*?
[3] Even though it might be argued that derivatives trading has only recently gained prominence (relatively speaking) hence the omission, this would not be an especially convincing argument because—as explained in chapter 2—clearing entities are no way recent infrastructures.
[4] Section 315 of the ISA 2007 defines a "clearing and settlement company" as "any corporate body who acts as an intermediary in making payments or deliveries or both in connection with transactions in securities and provides facilities for comparison of data regarding the terms of settlement of securities transaction on or for the allocation of securities settlement responsibilities".

the regulator can issue rules to the market sanctioning, in effect, the creation of market participants or infrastructures which are neither uncontemplated nor provided for by lawmakers (such as CCPs or trade repositories). As we established in chapter 2, a clearing and settlement company is different to a CCP.[5] As demonstrated in chapter 3, this gap triggers a credible fear that *ultra vires* concerns could foreseeably arise, in the absence of further reform.[6]

The fractures found in relation to multilateral CCP netting outlined in the previous chapters further support this finding of a weak statutory firmament. In particular, chapter 4 and chapter 5 help us understand that while the transplantation process was defective, infected with evidence of private capture (among other flaws), the gaps which persist in the extant framework, despite recent reform, exist because a wholesale review of the entire financial regulatory compact has yet to be conducted in the jurisdiction (as the British and the South Africans have done over time and especially after the GFC). No doubt, such a step would have gone a long way in the construction of a much more robust and durable financial regulation firmament. In particular, therefore, it is clear that additional (comprehensive) reform is required as far as the country's derivatives laws are concerned to cover the following (among other things): netting, collateral and security regime, and CCPs' activities.[7]

6.2.2. Sub-optimal Institutional Structure

The second principal finding in this work is that the institutional structure relevant to derivatives regulation in the country is sub-optimally contrived.[8] Chapter 3 outlined the initial concerns in respect of this point, but these were explored more fulsomely in chapter 5 where the Nigerian institutional structure was compared to the UK's and South Africa's. Two very important points quickly become apparent from the comparative exploration in chapter 5.

Firstly, and more broadly, if it was not the case before, it has become glaring that there is now an urgent need for legislative and regulatory actors in Nigeria to make a robust assessment as to the appropriateness/utility of the extant regulatory model in the Nigerian financial regulatory compact. It needs to be determined whether it is fit for purpose. Quite simply, this means that the larger question as to whether Nigeria needs to adopt an integrated regulatory model, or the twin peaks regulatory model, or some sort of hybrid, needs to be engaged with and settled quickly. In the absence of such an examination, the view in this dissertation is that the wider financial regulatory

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[5] See chapter 2 at 2.8.1.

[6] Joanne Braithwaite, 'Thirty Years of *Ultra Vires*: Local Authorities, National Courts and the Global Derivatives Markets' [2018] 71(1) Current Legal Problems 369–402.

[7] See chapter 3 at 3.3.

[8] It is perhaps fair to note that this sub-optimal design might very well exist because of the reactive nature of financial regulation in the country, but, then again, this is not a point which absolves regulatory actors and legislators of their failures in this respect.

scheme will remain weak.[9] Currently, the country adopts a sectoral and functional regulatory approach (with regulators sometimes working at cross purposes)[10] which can be costly and inefficient, as the South Africans recently came to find.[11] Exhortations by Nigerian scholars in this respect, therefore, need to be heeded.[12]

Secondly, and more relevantly, chapter 5 shows us why—in the respectful view of the researcher—the SEC might not be the appropriate financial market regulatory to exert principal purview over the Nigerian derivatives market as is currently the case.[13] *Why might this be*? The response to this question can be found in the directionless nature of the local regulatory scheme. To wit, as shown in previous chapters,[14] derivatives with FX as their underlying under current Nigerian law fall within the purview of the CBN.[15] Further, banks, which originate risk in derivatives markets, fall under the principal purview of the CBN, meaning the SEC's regulatory visibility of their affairs is limited, and, lastly, CCPs which are now centralising systemic risk[16] are not currently supervised or regulated by the CBN.[17] The ability to supply the public good of financial stability becomes questionable in these circumstances, given this regulatory asymmetry.

6.2.3. Fragile Appurtenant Infrastructure

The third principal finding in this work is that the appurtenant infrastructure (i.e., CCPs) aimed at supporting derivatives markets (especially post the GFC) is fragile.[18] Totally separate from the point made above as to whether the ISA 2007 properly empowers the SEC to, in effect, sanction the creation of CCPs *via* its issuance of the *SEC Derivatives and CCP Rules*, is the understanding which we gain from chapter 3 and chapter 5 that there is no statutory endorsement of CCPs' operations in Nigeria, triggering legal uncertainty about CCPs' default management procedures, collateral management processes, and multilateral netting mechanisms. Because of the importance

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[9] It is impossible to make an informed view on this question in this work because answering this question will require comprehensive study.
[10] See, for example, Louise Osemeke and Emmanuel Adegbite, 'Regulatory Multiplicity and Conflict: Towards a Combined Code on Corporate Governance in Nigeria' [2016] 133(3) Journal of Business Ethics 431-451.
[11] See chapter 5 at 5.3.2.
[12] Folarin Akinbami and Franklin Ngwu, 'Overhauling the Institutional Structure of Financial Regulation in Nigeria: The Unfinished Reform' [2016] 17(4) Journal of Banking Regulation 311-331.
[13] At least, not on current terms.
[14] See chapters 3 and 5 in particular.
[15] Section 1 of FEMM Act 1995.
[16] The risk CCPs now pose in financial systems was explored in chapter 2 at 2.11.
[17] To describe this confused dynamic in other words, the SEC purports to enjoy regulatory purview of the derivatives market, but the CBN in fact has some purview, while the CBN does not have oversight over entities such as CCPs, which it in fact should.
[18] Joanne Braithwaite and David Murphy, 'Central Counterparties (CCPs) and the Law of Default Management' [2017] 17(2) Journal of Corporate Law Studies 291-325.

of this matter, in chapter 3, this study explored the default management processes in the FMDQ OTC FX futures market and concluded that the event of default provisions which gird this market have no statutory basis, further reiterating the imperative for reform.[19] In short, the new netting law fails to provide for a disapplication of conflicting insolvency law for CCPs, as it relates to market contracts, market charges, market property, and CCP default rules in Nigeria.

6.2.4. Limited Product and Regulatory Understanding

The fourth principal finding in this work concerns general market regulatory capacity and understanding.[20] A synthesis of all the findings outlined in the previous chapters indicates that Nigerian derivative market stakeholders require enhanced technical understanding of the financial markets and products in these markets. This much is apparent from the existence of fractures outlined throughout this dissertation. This knowledge-gap will need to be cured with deliberate capacity enhancement programmes across the entire derivatives trading value-chain.[21] In particular, though, regulatory actors will need to undergo extensive and continuous training on the nature of derivatives and the peculiarities which accompany the trading and regulation of these financial instruments.

6.3. Specific Reform Propositions

As will have been gathered from all the arguments made thus far, the view in this work is that the entire Nigerian financial regulatory architecture is due a much needed and comprehensive overhaul. From which regulatory model best suits the country to the allocation of regulatory powers between the various financial services regulators, numerous questions, gaps, and deficiencies abound.[22] Addressing this set of issues in any comprehensive manner is, of course, outside the scope of this work, so we shall focus only on fractures as it concerns the derivatives regulatory scheme. The sub-section which follows sets out specific reform propositions developed on the basis of the research conducted in this study.

6.3.1. Reform Proposition 1: Definitional Clarifications

This work recommends clarification of the definition of 'derivative' in the Nigerian derivatives regulatory framework. The gaps which accompany the current definition in the ISA 2007 were

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[19] See chapter 3 at 3.1.1.2.
[20] Important to note, of course, that this is not a legal or statutory matter, strictly speaking.
[21] Stakeholders include (but are not limited to) market infrastructure groups, lawmakers, regulators, personnel within market participants, transaction advisers, and investors.
[22] See chapter 3, chapter 4, and chapter 5 in general.

explained in chapter 3. In contrast, we have seen how the definitional approach adopted by the UK[23] and South Africa[24] (and even Canada)[25] allows those comparator jurisdictions avoid the pitfall of applying securities-related doctrines to derivatives.[26] As noted too, applying investor protection frames which underpin traditional securities market laws to derivatives would make derivatives markets unduly cumbersome and unattractive as participants in these markets are generally sophisticated, not retail investors buying shares in equities markets.[27] This is a defect that needs to be cured to enhance transaction liquidity and velocity in the Nigerian derivatives markets. Here, in effecting reform, either the UK or the South African definitional approach will suffice, as a starting point.[28] This needs to be effected in a law.

6.3.2. Reform Proposition 2: Redesign of Institutional Structure

This work recommends the redesign of the institutional structure in the Nigerian derivatives regulatory framework. Previous chapters in this work have discussed the flaws of the country's regulatory framework in this respect. Specifically, in chapter 3, this study demonstrated how the absence of regulatory synchrony between the CBN and the SEC creates fractures in the regulatory scheme, carrying with it the potential to trigger (or exacerbate) financial crises, such as was observed with the subprime crisis in the US.[29] In chapter 5, drawing lessons from the UK and the US, we saw how jurisdictional turf wars—in addition to engendering regulatory uncertainty—can stifle innovation and financial market development.[30] Therefore, regulation curing matters of jurisdictional and regulatory conflict, clarifying the regulatory mandates of Nigeria's derivatives (and financial market regulators), and reallocating powers as may be appropriate between them is urgently required.

The recommendation in this dissertation (in the absence of wholesale reform of the entire financial regulatory scheme) is that the two principal regulatory actors currently operating in the Nigerian derivatives scheme—the SEC and the CBN—should be maintained; however, importantly, this dissertation recommends dramatic reallocation of powers/jurisdiction as between these two actors

[23] See chapter 5 at 5.2.2.
[24] Ibid.
[25] Ibid.
[26] Aaron Libbey, 'Getting Our Act Together: A Review of the Canadian Derivatives Regulatory Landscape and an Argument for a Dedicated Derivatives Regime' [2010] 19 Dalhousie Journal of Legal Studies 30-63. ("It is possible that attempting to fit derivative instruments under the securities regime is, in many cases, an attempt to drive a square peg into a round hole.")
[27] See chapter 3 at 3.3.1.
[28] This dissertation favours adoption of framework legislation as exists in these two comparator jurisdictions.
[29] Jerry Markham, 'Merging the SEC and CFTC—A Clash of Cultures' [2009] 79 University of Cincinnati Law Review 537-611.
[30] John Benson, 'Ending the Turf Wars: Support for a CFTC/SEC Consolidation' [1991] 36(5) Villanova Law Review 1175-1217.

in the derivatives market, constructing a 'mini-twin peaks regulatory approach'. Specifically, this work recommends that the SEC should be entirely positioned as a conduct regulator in the Nigerian derivatives market, while a function connected to (or domiciled in) the CBN should be positioned as a prudential regulator in the derivatives market with the unambiguous task of promoting the safety and soundness of participants and the derivatives markets.

As discussed in previous chapters, there is plenty of evidence to demonstrate that the SEC might simply be incapable of discharging the role of prudential regulator it seeks to execute. It is simply not built for the task.[31] In chapter 5, we saw that derivatives market participants in the UK are dual regulated in that they are supervised by the PRA to the extent that it is a prudential matter and by the FCA to the extent that it is a conduct matter. We also saw that in South Africa, derivative market participants are similarly dual regulated in that they are supervised by the Prudential Authority to the extent that it is a prudential matter and by the Financial Sector Conduct Authority to the extent that it is a market conduct matter. This work recommends that such an approach should be adopted in the Nigerian derivatives market. This needs to be effected in a law.

6.3.3. Reform Proposition 3: Strengthening of Statutory Netting Provisions

This work recommends the strengthening of the statutory netting provisions contained in Nigerian law. This study revealed gaps which remain in Nigerian law despite recent reform on netting (among other things). In particular, we saw that the inclusion of the *2006 ISDA Model Netting Act* in the CAMA 2020 only helps cure fractures which concern OTC bilateral derivative transactions;[32] gaps persist as it relates to multilateral CCP netting.[33] We also saw how the netting provisions outlined in the BOFIA 2020, while useful, only provide legal certainty to the extent that a clearing member on a CCP is a failing bank or a financial institution whose default event (and multilateral netting event in question) on a clearing system is triggered by its insolvency or the revocation of its operating licence.[34] These are gaps that need to be cured, with the benefits derivable from netting being extended to the entire perimeter of the Nigerian derivatives scheme. This needs to be effected in a law.

[31] See, for example, chapter 3 at 3.3.2. (questioning the SEC's ability to effectively conduct surveillance of banks given that it has less proximate visibility of their operational affairs compared to the CBN) and chapter 5 at 5.2.3.4. (questioning the SEC's ability to help resolve a failing CCP).
[32] See chapter 3 at 3.3.3.
[33] On the importance of netting as a mechanism to mitigate counterparty credit risk and systemic risk in derivative markets, see chapter 2.
[34] As explained in chapter 3, where a clearing member is a SEC-regulated securities dealing firm on a CCP and not a CBN-regulated bank or other financial institution, no statutory protection is extended under the BOFIA.

6.3.4. Reform Proposition 4: Enhancement of Collateral and Security Regime

This work recommends the strengthening of the collateral and security regime in the Nigerian derivatives scheme. Chapter 3 found that the collateral and security regime which currently exist under Nigerian company law is from an era which preceded the proliferation of derivatives and is therefore suited, primarily, to traditional bank lending, not a modern derivatives market where financial collateral would typically be debt securities or even cash. Collateral underpinning derivative transactions ought not to be subject to onerous perfection requirements as is the case in Nigeria currently.[35] This fracture needs to be cured in a law. Specifically, this work recommends that section 222 of the CAMA 2020 should be amended. Such an amendment can borrow from the FCAR, which, as discussed in chapter 3, harmonises rules for the creation, perfection, and enforcement of financial collateral across the EU and increases legal certainty as it concerns these kinds of financial arrangements.

6.3.5. Reform Proposition 5: Statutory Endorsement of CCPs' Operations

This work recommends that CCPs' operations in Nigeria should be explicitly endorsed in statute.[36] This very important point became thoroughly clear following the comparative analyses conducted in chapter 5. Specifically, we saw that the difference between the FCAR and the CAMA 2020 on statutory endorsement of CCPs' operations is quite clear. In particular, the Nigerian derivatives regulatory framework is missing key statutory concepts such as "market contracts", "market charge", and "market property", defined broadly, as constructed within UK law, to cover margins connected to market contracts and default fund contributions which support multilateral CCP netting, settlement finality, and default management. These gaps do need to be cured urgently. Importantly too, such statutory reform will close the fracture discussed above in relation to the default management processes in the FMDQ OTC FX futures market, which this work argues have no statutory basis.[37] These changes need to be effected in a law.

6.3.6. Reform Proposition 6: Development of a CCP Resolution Regime

This work recommends that a resolution regime for CCPs in Nigeria should be formulated and documented as a matter of urgency. In chapter 2, we saw how the increasing concentration of risk within CCPs can germinate into broader systemic risk given their increasing centrality in financial

[35] As explained in chapter 4, under the CAMA 2020, despite recent reform, an obligation to stamp exists. Unhelpfully, Nigerian law provides that an unstamped document cannot be tendered in evidence, other than in criminal matters.
[36] This will further clarify legal uncertainty on multilateral CCP netting existent in Nigeria.
[37] See chapter 3 at 3.4.2.

systems.[38] On this, the risk in Nigeria is especially acute given the emerging linkage and centrality between FMDQ Clear Limited (which is the major clearing entity in the Nigerian financial market) and the banking system. This circumstance is made worse because the *SEC Derivatives and CCP Rules* do not contemplate a role for the CBN should a Nigerian CCP fail, an impractical dynamic. Added to this, under current Nigerian law, a failing CCP would have to be resolved as any company would under basic insolvency principles, a circumstance which is obviously unrealistic for CCPs given their systemic characteristic. These gaps, of course, need to be urgently cured in a statute.

6.3.7. Other Proposals: Deepening Capacity and Resources

As noted above, the findings outlined in the previous chapters indicate that Nigerian derivative market stakeholders require enhanced technical understanding of modern financial markets and applicable financial products. With respect to derivatives in particular, this knowledge-gap will need to be cured by systematic and deliberate capacity enhancement programmes across the entire derivatives trading value-chain. In particular, all market stakeholders (market infrastructure groups, lawmakers, regulators, personnel within market participants, transaction advisers, and investors) will need to undergo extensive and continuous training on the nature of derivatives and the peculiarities which accompany the trading of these financial instruments. This means, in addition, that key regulatory actors, in particular the SEC, will have to be better funded, since it is the *de facto* regulator in the Nigerian derivatives market at present.[39] Currently, the SEC funds its annual budget by levying market participants and this carries with it the associated risks of moral hazard, asymmetry of incentives, and also raises questions as to whether the regulator has sufficient resources to enable it effectively perform its regulatory and oversight duties.[40]

6.4. Effecting Reform: *A Derivatives Markets Act?*

To robustly effect the reform proposals outlined above, the issue which would, of course, follow concerns how recommended statutory reform might be implemented to avoid a repeat of the problems associated with the most recent reform process (discussed in chapter 4) in a jurisdiction which has not demonstrated historical keenness for wholesale comprehensive reform. To tackle

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[38] Froukelien Wendt, Central Counterparties: Addressing their Too Important to Fail Nature (2015) *IMF Working Paper WP/15/21* 5 <https://www.imf.org/external/pubs/ft/wp/2015/wp1521.pdf>.

[39] Jerrywright Ukwu, 'Senate Committee Queries SEC over ₦10billion Annual Salary for 600 Staff' *Legit* <https://www.legit.ng/1359905-senate-committee-queries-sec-n10billion-annual-salary-600-staff.html> accessed 24 January 2021.

[40] This issue of inadequate funding is one the US SEC too is grappling with. See "SEC Funding", available at: <https://www.cfainstitute.org/en/advocacy/issues/sec-funding>.

this, this study proposes the enactment of a *Derivatives Markets Act* for the Nigerian derivatives market.

Again, important questions might follow. *How will this proposed law be structured*? *Which provisions will it cover*? *Which regulatory actor(s) will superintend over this market*? The comparative examination conducted in chapter 5 hold some very instructive lessons in answering these questions. However, before getting into this, we shall proceed at a point where this dissertation started in chapter 1: the conceptualisation of an optimally ordered derivatives regulatory framework and appurtenant infrastructure. This conceptualisation helps us understand that full implementation of the Pittsburgh Summit commitments and the non-G20 parameters detailed in chapter 1 ought to be a regulatory/statutory objective in Nigeria when it comes to reform.[41] The documentation of the Pittsburgh Summit commitments into law, against the backdrop of extant dynamics in the local legal system, is a statutory reform outcome broadly recommended in this work therefore.[42]

Added to the foregoing and in answering the above questions, we now turn to how the *Derivatives Markets Act* proposed by this work should be structured. A caveat is in order, though. This proposed law is being sketched in the absence of wholesale financial regulation reform, which this dissertation, to be clear, advocates for. That said, a major learning upon which we will predicate the structure of this proposed law on is the framework statute design which the UK FSMA and SA FMA adopt.[43] Such an approach is recommended because framework statutes allow for regulatory flexibility, as opposed to a prescriptive legislative approach which does not lend itself to innovation and change.[44] Granted, framework statutes tend to cover the entire perimeter of a financial market in a jurisdiction, it will, however, be noted that we have assumed here that only the Nigerian derivatives segment will be reformed.[45] Therefore, the recommendation in this work is the construction of a framework statute to cover only the perimeter of the derivatives regulatory framework. Table 6.1. which follows sets out an outline of the proposed law and how it might potentially be structured to cure the fractures found in this research.

[41] See chapter 1 at 1.2.
[42] Importantly, this will place the local derivatives market in a position to leapfrog developmentally once the other fractures outlined in this study are closed.
[43] This important drafting approach allows for regulatory flexibility and encourages innovation as market participants are not constrained from developing new products.
[44] In chapter 5, we noted that the ISA 2007 was entirely prescriptive, and this is responsible for some of its gaps currently. Its provisions simply do not contemplate the complexity, innovation, and developments which have occurred in the Nigerian financial markets since its enactment. See chapter 5 at 5.2.2.
[45] The view in this work is that this is a reasonable assumption to make given that Nigeria has yet to effect a wholesale review of its financial regulatory compact.

Table 6.1.: Contemplated outline for proposed *Derivatives Markets Act*

S/N	Suggested provision	Contour and drafting approach
1.	Coverage and purpose of law	Given the overall sub-optimal financial regulatory design in Nigeria, it is vital to stipulate clearly the intended coverage and purpose of the proposed law. Doing so will end the current (and rather unsuccessful) attempt to stretch coverage of the ISA 2007 (a securities law) to derivatives. Further, it should be made clear that the law applies to all derivative instruments, irrespective of the asset class which a derivative might be based on.[46] It must, of course, also be made clear that the proposed law covers OTC derivatives and ETDs (which should both be defined separately and distinctly) to close the arbitrage fracture identified in chapter 5.[47] In relation to OTC derivatives, such an approach would also provide draftsmen with the latitude to construct a regulatory regime incorporating the Pittsburgh Summit commitments into Nigerian law.[48] Taking a page from EMIR, provisions on the three main pillars—(i) reporting of exchange-traded and OTC derivatives transactions to trade repositories; (ii) mandatory central clearing obligations in relation to specific classes of OTC derivatives; and (iii) risk mitigation techniques in respect of all OTC derivatives which are not subject to mandatory central clearing—should be set out in the proposed law. This would help position the Nigerian derivatives compact to compete globally, as a starting point.
2.	Definitions	The definition section should aim to cure all the definitional fractures identified under the current regime. In particular, the proposed law should redefine "derivative" based on the financial instrument's actual normative nature, moving away

[46] Recall that chapter 3 finds that regulatory/jurisdictional conflict does exist in Nigeria with the CBN exerting purview over FX derivatives while the SEC exerts purview over derivatives based on other asset classes.
[47] See chapter 5 at 5.2.2.1.
[48] The *SEC Derivatives and CCP Rules* attempts to document these commitments into the regulatory framework; however, recall that this dissertation questions the legal efficacy of this regulation.

S/N	Suggested provision	Contour and drafting approach
		from the current characterisation of the financial instrument as a "security". For OTC derivatives, the definitional approach adopted by the 2018 ISDA Model Netting Act whereby a financial regulatory body can designate "qualified financial contracts" as "derivatives" from time to time may also be adopted. This will ensure definitional flexibility.[49] Because the proposal here is that the SEC and the CBN should co-regulate the derivatives market, they could make joint decisions in this respect.[50] Further, it is important to specifically define the phrase "Nigerian derivatives market" and then connect the coverage of the proposed law to this concept. Attention must be paid to the territorial scope of the proposed law by draftsmen, who must consider whether such a phrase should be crafted in reference to the geographic connotation of the country, or whether it should be crafted in reference to derivative transactions which might have a connection to participants in Nigeria, the local currency, or any Nigerian component in the trading value-chain, no matter how fleeting.[51] Added to this, specific definitions should be set out for all market participants and infrastructures which will operate within the derivatives trading value chain.[52]
3.	Derivative market regulators	The proposed law should set out the relevant regulatory bodies which shall be tasked with superintending over the derivatives market and

[49] See section 1 of the 2018 ISDA Model Netting Act.
[50] Below, this work sets out a proposal on how the SEC and CBN will co-regulate the derivatives market.
[51] The view in this work is that the concept of "Nigerian derivatives market" should be defined broadly, meaning it should be crafted in reference to derivative transactions which might have a connection to participants in Nigeria, the local currency, or any Nigerian component in the trading value-chain in order to allow for innovation.
[52] Recall that chapter 3 finds that key participants and infrastructures (such as CCPs and trade repositories) are not contemplated by the ISA 2007, even though the SEC has sanctioned their creation (by subsidiary regulation), raising *ultra vires* concerns.

S/N	Suggested provision	Contour and drafting approach
		then clearly allocate regulatory powers as between them. As noted above, these would be the SEC and the CBN.[53] This work recommends that the SEC should be entirely positioned as a conduct regulator in the Nigerian derivatives market, while a function connected to (or domiciled in) the CBN should be positioned as a prudential regulator in the derivatives market with the task of promoting the safety and soundness of participants and the derivatives markets, an imperative which remains in alignment with the CBN's statutory obligation to "promote a sound financial system".[54] The SEC should also serve as listing authority for listed derivatives (just as the FCA does in the UK). Importantly, as to how the derivatives market will be co-regulated and to manage any potential conflict between the SEC and CBN while addressing all the regulatory confusion discussed in previous chapters,[55] this work would recommend that a process be built into the proposed law obligating the two regulators to develop and agree to a "*Five-Yearly Derivatives Markets Regulatory Outline*". This framework will be considered and approved by the Federal Minister with oversight over economic affairs. This framework would be updated every five years and laid before the Minister for consideration and approval to ensure it remains relevant. It will also ensure synchrony and coordination between both agencies, going forward.

[53] Reference to CBN here is to the specific function within the regulator which will be responsible for the contemplated prudential regulation.
[54] Section 2(d) of the CBN Act 2007.
[55] See chapters 3 and 5, in particular.

S/N	Suggested provision	Contour and drafting approach
4.	Authorisation and regulation of market participants and infrastructures	The proposed law should provide that both the SEC and CBN shall be responsible for authorising and regulating derivative market participants and infrastructures as a matter of course. However, to prevent reporting duplication and engender efficiency for regulated entities, the statute should place an obligation on the derivative market regulators to interface with and engage the regulated entities in a coordinated manner. The proposed law should set out clear, systematic, and robust requirements which market participants and infrastructures must meet before authorisation. Especially important is the financial resources requirement relevant to CCPs' which must be robustly designed and predictable.[56] The functions and role market participants are to discharge in this market should also be clearly outlined. Finally, to make the Nigerian derivatives market internationally competitive, a recognition regime should be provided for international trading venues and clearing entities. The approach taken by the Singaporean Securities and Futures Act 2006 could be adopted here.[57] Sections 7 to 14 of this law sets out provisions in relation to the approval and recognition of foreign trading venues, while sections 49 to 56 outlines extensive provisions in relation to the approval and recognition of foreign clearing entities.
5.	Over-the-counter derivatives markets	Here, the proposed law should outline OTC derivative-specific provisions such as safe harbours in relation to bilateral close-out netting. It suffices to simply replicate the netting provisions currently contained in the CAMA 2020. Care must be taken to ensure there is no conflict between the CAMA 2020 and the proposed law on the point, so

[56] See chapter 5 at 5.2.3.2. and 5.3.3.2.
[57] See "Singapore Statutes Online", available at: <https://sso.agc.gov.sg/Act/SFA2001#pr49->.

S/N	Suggested provision	Contour and drafting approach
		the latter can outline provisions deleting derivatives provisions in the CAMA 2020, so all the relevant provisions are in one statute. Added to this, importantly, provisions designed to ensure the full implementation of relevant Pittsburgh Summit commitments should be outlined here.
6.	Exchange-traded derivatives markets	Here, the proposed law should outline ETD-specific provisions covering key statutory concepts such as "market contracts", "market charge", and "market property", defined broadly, as constructed within UK law, to cover margins connected to market contracts and default fund contributions which support multilateral CCP netting, settlement finality, and default management. Statutory language expressly endorsing CCPs' default management operations, carving them out from ordinary insolvency law, should also be clearly outlined here.[58] Added to this, the terms for listing ETDs should be outlined under this section. As mentioned above, the SEC should serve as listing authority for listed derivatives.
7.	Fair dealing, disclosure of offers, market practices, and systemic risk	It is important that the proposed derivatives law also set out relevant provisions designed to improve transparency in the derivatives markets, mitigate systemic risk, and protect against market abuse, all very crucial G20 commitments. These provisions should cover the following matters (among any others which might be considered appropriate): ▪ General misleading or deceptive conduct

[58] A synthesis of the relevant provisions in the UK's Part VII of the Companies Act 1989, the Financial Markets and Insolvency (Settlement Finality) Regulations 1999 and South Africa's section 35 of the Insolvency Act 1936 can be adopted here.

S/N	Suggested provision	Contour and drafting approach
		▪ Misleading conduct in relation to derivatives ▪ False or misleading representations ▪ Issue and sale offers requiring disclosure and relevant obligations ▪ Matters which must be disclosed to investors and clients ▪ Treatment of certain derivatives as being quoted financial products by a listed issuer ▪ Provisions on market manipulation ▪ Reporting mechanisms and requirements to the SEC and CBN; and ▪ Provisions designed to tackle systemic risk
8.	Financial reporting and tax treatment for derivatives	Here, the proposed law should set out provisions on how to report derivatives as financial instruments in companies' financial statements and also set out provisions in relation to tax treatment of derivatives.
9.	Enforcement, liability, penalties, and appeals	Here, the proposed law should set out provisions on relevant penalties, liabilities, and appeal processes. Instead of specifying numbers in the proposed law, the regulatory authorities should be empowered to revise these from time to time.
10.	Resolution of derivative markets participants and infrastructures	<u>Derivative market participants</u> The proposed law should set out provisions covering resolution for failing non-bank financial institutions who are derivative market participants, provided they are not already subject to resolution under the BOFIA 2020. It should also create and place and obligation on the CBN to have due regard to the smooth and efficient working of the Nigerian derivatives markets in a bank resolution scenario to prevent any over handedness, arbitrariness, or lack of due process. Finally, restrictions should be imposed on the CBN as resolution authority in the proposed law in

S/N	Suggested provision	Contour and drafting approach
		connection to netting arrangements which concern (1) suspension of the exercise of termination rights, (2) transfer of assets and (3) exercise of bail-in powers, so the CBN's powers will not interfere with netting arrangements in a resolution scenario. Derivative market infrastructures The proposed law should set out provisions directly providing a robust framework for failing market infrastructures (which would, of course, cover CCPs). These provisions should be modelled (with appropriate modification) after the EU CCP Resolution Framework explored in chapter 5 and should outline clear provisions concerning (a) preventative measures; (b) early supervisory intervention; and (c) resolution measures.
11.	Derivative market regulators' powers to issue regulations from time to time	Finally, the law should empower the market regulators with the broad powers to issue supplementary regulations from time to time.[59]

6.5. Suggestions for Complementary or Further Research

As far as the Nigerian derivatives legal and regulatory framework is concerned, the view is that the present work, with modesty, captures and explores the *fundamental* fractures existent in the local derivatives scheme to the extent practicable within the confines of the present research parameters. This is especially so when one considers that the Nigerian derivatives market is itself only at a nascent stage. Therefore, additional research in relation to this topic is not recommended *per se*. Rather, one crucial point became apparent amidst intense study of the Nigerian financial legal and regulatory framework: the larger question as to whether Nigeria needs to adopt an integrated regulatory model, or the twin peaks regulatory model, or some sort of hybrid, needs to be engaged with and settled quickly. Associated with this will be wholesale financial reform. In the absence of these, the wider Nigerian financial regulatory scheme will remain weak and lacking in clear direction. The development of Nigerian financial law is very much dependent on this fundamental point on the long-term. Tackling these matters will, of course, require comprehensive study and

[59] This will confer on the proposed law the 'framework' capability.

thus constitutes fertile ground for complementary financial regulatory enquiry.[60] A case for (more) integrated financial regulation in Nigeria might be an attractive prospect, given the country's current and long-term economic trajectory.[61] Although it should be noted that 'more integration' does not necessarily connote 'amalgamation'.

6.6. Conclusion

There is no doubt that the derivatives framework in Nigeria will continue to be integral to the country's economic compact, given the risks inherent in the country's financial markets and its continued dependence on crude oil for its revenue earnings. It remains important, therefore, that the legal and regulatory framework which underpins this important market segment is rooted in certainty and clarity. Optimal ordering is also crucial. Both of this are currently missing, as is argued in this study. Only once achieved can the advantages which accompany these fascinating instruments then be beneficially harnessed to help advance the cause of developing Nigeria's financial markets and broader economic compact. The importance of this is not lost on the country's legislative and regulatory actors, which is why we have seen recent attempts at extensive reform in the country in quick succession.[62]

They have however approached it the wrong way and thereby lost a crucial opportunity. This work has sought to explain why.[63] Crucially, though, what this work has also done—in addition to identifying the exact fractures in the Nigerian legal and regulatory derivatives framework—is construct potential solutions to these fractures. These proposed solutions are presented with the full understanding that mechanical transplantation of legal norms into developing countries' legal systems will not work if their legal systems are not properly understood as a fundamental starting point.

[60] The scope of a such a study, methodology, etc. will need to adequately dimensioned and scoped.
[61] See "Doing Business in Nigeria", available at: <https://www.worldbank.org/en/country/nigeria/overview#1>.
[62] See chapter 1 at 1.1.
[63] See chapters 4 and 5.

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