

Financial Regulation and Economic Integration:

Central Counterparties in WTO, Economic Integration Agreements, and EU Competition Law

George A. Papaconstantinou

Thesis submitted for assessment with a view to obtaining the degree of Doctor of Laws of the European University Institute

Florence, 08 April 2020

European University Institute Department of Law

Financial Regulation and Economic Integration:

Central Counterparties in WTO, Economic Integration Agreements, and EU Competition Law

George A. Papaconstantinou

Thesis submitted for assessment with a view to obtaining the degree of Doctor of Laws of the European University Institute

Examining Board

Prof. Stefan Grundmann, European University Institute (supervisor)

Prof. Petros C. Mavroidis, European University Institute, Columbia Law School

Prof. Christos V. Gortsos, National and Kapodistrian University of Athens

Prof. Lorenzo Stranghellini, University of Florence

© G.A. Papaconstantinou, 2020

No part of this thesis may be copied, reproduced or transmitted without prior permission of the author

Researcher declaration to accompany the submission of written work Department of Law – LL.M. and Ph.D. Programmes

I George A. Papaconstantinou certify that I am the author of the work "Financial Regulation and Economic Integration: Central Counterparties in WTO, Economic Integration Agreements, and EU Competition Law" I have presented for examination for the Ph.D. at the European University Institute. I also certify that this is solely my own original work, other than where I have clearly indicated, in this declaration and in the thesis, that it is the work of others.

I warrant that I have obtained all the permissions required for using any material from other copyrighted publications.

I certify that this work complies with the Code of Ethics in Academic Research issued by the European University Institute (IUE 332/2/10 (CA 297).

The copyright of this work rests with its author. Quotation from this thesis is permitted, provided that full acknowledgement is made. This work may not be reproduced without my prior written consent. This authorisation does not, to the best of my knowledge, infringe the rights of any third party.

I declare that this work consists of 76.551words.

Statement of inclusion of previous work (if applicable):

I confirm that chapter II draws upon an earlier article I published "The GATS and Financial Regulation: Time to Clear-house?", World Trade Review, Cambridge University Press, 2019.

I confirm that chapter III draws upon an earlier book chapter I published "Financial Services Liberalization under EU FTAs: The Case of Clearing and Settlement Services", Global Politics and EU Trade Policy, European Yearbook of International Economic Law, Springer, 2020.

Signature and date:

08.03.2020



ACKNOWLEDGEMENTS

This doctoral thesis has been an endeavour that started at the European University Institute (EUI) in Florence in 2015. EUI provided the stimulating academic environment to conceptualize and develop this thesis but, interestingly, the project also evolved in a number of other places, including Geneva, New York City, and Brussels. Identifying the steps undertaken together with the individuals who helped me deepen my knowledge while contributing to improving this project over the last four years is of utmost importance to me.

At the outset, I would like to thank my supervisor Prof. Stefan Grundmann for his support and guidance from the very beginning of this journey. No matter the intellectual challenges associated with this PhD project, Prof. Grundmann has been providing his input and never stopped encouraging me to pursue innovative ways to approach financial regulation.

This thesis has benefitted immensely from comments and from discussions with Prof. Petros C. Mavroidis, who was my supervisor at Columbia Law School, where I was a Fulbright Schuman Visiting Scholar in 2017-2018. I had the privilege to meet Prof. Mavroidis at the EUI in 2015. Since then he has generously offered thoughts and insightful observations that have fueled this PhD project. He is a source of inspiration to me and I owe him a large part of what I know about international trade law.

Since this doctoral project was borne and developed at the EUI in Florence, I would like to acknowledge the important role that professors, library staff, academic assistants and fellow researchers played in improving its quality. Notably, I would like to thank Prof. Bernard Hoekman, who has always been open to discuss the subject matter of my thesis and the political implications of the interplay between financial regulation and international trade. Additionally, special thanks are due to Prof. Ernst-Ulrich Petersmann, Hans Micklitz, Giorgio Monti, Jürgen Kurtz, and Simon Deakin for rewarding discussions.

At the World Trade Organization, I had the chance to work with Juan A. Marchetti on issues relating to trade in financial services. Mr. Marchetti's generosity in sharing his insights and experience on trade in financial services contributed to broadening my understanding of the interplay between regulation and economic integration. Working with him and discussing the research question and tentative findings of my doctoral thesis have been invaluable. In

addition, I gained a great deal of useful feedback from interactions with Hamid Mamdouh, Antonia Carcaniga, Jocelyn Magdeleine, Martin Roy, Tomasz Koziel, and Adam Jakubik.

During my academic stay at Columbia Law School, my PhD project benefitted hugely by exposure to empirical research in legal scholarship. I had the chance to discuss my doctoral project and acquire useful input from professors and scholars. Notably, I would like to acknowledge the importance of discussions with Prof. Katharina Pistor, Anu Bradford, John Coffee, Merritt Fox and George Bernmann. In New York City, I also had the chance to meet and engage in intriguing academic discourse with Thomas Streinz, Dan Awrey, Julian Arato, Joseph Weiler and Rob Howse.

In Brussels, the last part of my doctoral project was drafted and the thesis took its final shape. At the European Commission, I had discussions with Bart de Meester, Mislav Mataija, James Flett, Lothar Ehring, Michael Fridrich, Krzysztof Pawlowski and Colin Brown, and gained valuable feedback for finalizing my thesis. At White & Case LLP, my understanding of the practice of EU and international competition law has significantly increased and I want to express my gratitude to James Killick.

This thesis has further benefitted from comments and from discussions with Panagiotis Delimatsis, Carlo Cantore, Christos Gortsos, Marcus Sohlberg, Gert Van Calster, Jasper Wauters, Jan Wouters, Dylan Geraerts, and Jacques Bourgeois.

For the completion of this PhD thesis, I received ample economic assistance from the Greek State Scholarship Foundation (I.K.Y.) and the EUI. Additionally, the Fulbright-Schuman Commission funded my visiting scholar's programme at Columbia Law School and I would like to express my gratitude.

Beyond the pursuit of academic excellence, a PhD thesis is a journey that although lonely in nature requires good co-travellers. In light of this, I would like to thank everyone who has participated in my journey. Specifically, I would like to thank my cohort peers (and top boys) Tarik and Luigi for all the fun memories in Florence and beyond. Also, special thanks go to Nikos, Giannis, Aderito, Christy, Mikaella, Margherita, Galyna, Maria, Dimitri, Giorgos, Kostas, Sotiris, and Alexandros.

Heraclitus wrote "Πάντα ῥεῖ" (everything flows); however, some things remain unchanged and one of them is my affection for my family. This PhD thesis is dedicated to my mother Athina, my father Antony, and my sister Chrysa-Aggeliki. Their unconditional love

and support have helped me across all the steps of carrying out this project. My parents have conveyed the joy of pursuing knowledge and I am deeply indebted to them for this. Additionally, my grandparents Ioannis and Aggeliki have always encouraged me to forge my own path and I will always be grateful to them.

This thesis might never have come to fruition had it not been for my grandfather George A. Papaconstantinou – legal scholar and Stanford alumnus – whom I never had the chance to meet. His academic accomplishments have inspired me since my earliest days.

Last but not least, my partner Viorica's love, patience, and support have helped me navigate through all the challenges of this doctoral project. She has played a big part in this journey and I am grateful for her companionship.

Brussels, 8 March 2020

ABSTRACT

This thesis investigates the interplay between financial regulation and economic integration in the context of financial market infrastructure. This inquiry is driven by the prominence of both regulatory frameworks and economic integration platforms in determining the degree of liberalization for financial services sectors. In the aftermath of the 2008 financial crisis, clearinghouses have emerged as essential financial institutions for the financial system as the result of regulatory overhaul. This thesis examines their role within three major economic integration settings, namely, the WTO, Economic Integration Agreements and EU Competition law, and explores whether a more harmonious relationship between financial regulation and economic integration is feasible and, if so, how it can be achieved. Given the existing body of literature falls short of providing a critical eye on the relationship between the regulation of clearinghouses and the abovementioned economic integration models, this thesis aims to fill this lacuna. The overarching question put forward by this study seeks to identify the parameters pertinent to promoting or discouraging the liberalization of financial market infrastructure within the different economic integration settings covered by the analytical framework of the thesis. Against this backdrop, the thesis underscores the existence of both structural barriers to trade (e.g. in the form of inadequate regulatory transparency) and trade-facilitating tools (e.g. the use of competition law and policy in the EU) that can impede and foster the further integration of financial market infrastructure, respectively. Ultimately, the thesis extrapolates policy recommendations in respect of utilizing a number of tools that can contribute to further liberalization of the financial market infrastructure without jeopardizing the financial system's soundness and integrity should States decide to pursue this objective.

TABLE OF CONTENTS

			TABLE OF CONTENTS	Daga	
D 1	I. C		0- 7 7	<u>Page</u>	
PART 1.			R OF THE THESIS		
2.	RESEARC	CH QUEST	TION	2	
3.	Метнор	OLOGY		5	
4.	THE STR	UCTURE (OF THIS THESIS	7	
PART	II: Financ	IAL REG	ULATION AND WTO LAW	9	
1.	Introdu	CTORY F	REMARKS	9	
2.	EU LEGA	al Fram	EWORK AND FUNCTIONS OF CCPs	10	
3.	THE EUR	OPEAN R	REGIME FOR THIRD-COUNTRY CLEARINGHOUSES	14	
	3.1	Тне 'Е	QUIVALENCE' RULES	16	
4.	TRADE IN	N FINANC	CIAL SERVICES UNDER THE GATS: THE RELEVANT SCOPE AND		
	MODES OF SUPPLY ASPECTS FOR CLEARINGHOUSES				
	4.1	THE GA	ATS 'PLAYBOOK' – SCOPE OF APPLICATION	19	
	4.2		JPPLY OF FINANCIAL SERVICES THROUGH THE GATS MODES 1 NOT KEEPING UP WITH EVOLUTION	23	
5.	Assessin	NG THE V	VTO LAW CONSISTENCY OF THE EUROPEAN UNION CCP REGIME	28	
	5.1	ANALY	SIS UNDER THE GATS ARTICLE VI ON DOMESTIC REGULATION.	28	
		5.1.1	EMIR'S EQUIVALENCE FRAMEWORK EVALUATED UNDER THE GATS ARTICLE VI:1	29	
		5.1.2	ASSESSING TRANSPARENCY ELEMENTS UNDER THE EMIR EQUIVALENCE SYSTEM THROUGH THE GATS ARTICLE VI:5	34	
	5.2		YSIS UNDER THE GATS ARTICLE II ON MFN TREATMENT FOR CUROPEAN CLEARINGHOUSES	38	
		5.2.1	'LIKENESS' ASSESSMENT UNDER THE GATS ARTICLE II	38	
		5.2.2	'LFT' ASSESSMENT UNDER THE GATS ARTICLE II	42	
	5.3		VSIS UNDER GATS ARTICLE VII ON RECOGNITION AGREEMENTS NANCIAL SERVICES	45	
	5.4		YSIS UNDER THE GATS PRUDENTIAL CARVE-OUT FOR FINANCIAL		
6.	SUMMAR	Y OF THE	E FINDINGS	53	
PART	III: Finano	CIAL REC	GULATION AND THE PLURILATERAL TRADING SYSTEM	57	

1.	INTRODUCTION					
2.	METHODOLOGY6					
3.	Empiri	Empirical Analysis				
	3.1	FINDINGS64				
	3.2	COMMENTS ON EIAS COMMITMENTS: STABILITY AND COMPETITION CONSIDERATIONS				
	3.3	EIAs NOT REGULATING TRADE IN SECURITIES' CLEARING AND SETTLEMENT SERVICES AND INTERNATIONAL FINANCE				
	3.4	CLEARING AND SETTLEMENT COMMITMENTS IN EIAS: THE COUNTRIES THAT LEAD THE WAY AND THE PLAYBOOK OF INTERNATIONAL DYNAMICS FOR FINANCIAL SERVICES				
		3.4.1 AGGREGATE NUMBER OF CLEARING AND SETTLEMENT COMMITMENTS IN EIAS				
		3.4.2 MEASURING THE DEPTH OF CLEARING AND SETTLEMENT COMMITMENTS IN EIAS				
		3.4.3 THE ROADMAP OF GATS+ CLEARING AND SETTLEMENT COMMITMENTS FOR THE EU AND THE US IN EIAS				
4.	FINANC	AL MARKET INFRASTRUCTURE REGULATION AND THE STATES' SILOS IN				
	NEGOTIATING EIAs					
5.	CONCLUDING REMARKS					
Par	ΓIV: FINA	CIAL REGULATION AND EU COMPETITION LAW103				
1.	Introd	CTION				
2.	REGUL	TION AS A COMPETITION STIMULUS IN THE EU FINANCIAL MARKET				
	Infras	RUCTURE107				
	2.1	FINANCIAL REGULATION IN THE PURSUIT OF BREAKING UP SILOS				
	2.2	FINANCIAL REGULATORY PROVISIONS LIBERALIZING CLEARING SERVICES				
	2.3	COMPETITION ASSESSMENT OF THE FINANCIAL REGULATION114				
3.	THE APPLICATION OF COMPETITION LAW IN THE EU FINANCIAL MARKET					
	Infras	INFRASTRUCTURE: TOWARDS FURTHER LIBERALIZATION IN FINANCIAL SERVICES1				
	3.1	INTRODUCTORY REMARKS ON COMPETITION IN FINANCIAL SERVICES				
	3.2	EU ANTITRUST LAW (101 AND 102 TFEU) SCRUTINIZING FINANCIAL MARKET INFRASTRUCTURE				
		3.2.1 CLEARSTREAM: A CASE OF DOMINANCE IMPEDING COMPETITION IN FINANCIAL MARKET INFRASTRUCTURE				

		3.2.2	THE CDS CASES: THE COMMISSION INVESTIGATIONS RELATIN TO CDS CLEARING AND INFORMATION MARKET THAT, FINALLY, DID NOT HIT THE TARGET				
		3.2.3	THE MANIPULATION OF INTEREST RATE DERIVATIVES: ANTI- COMPETITIVE TRADING UNDER THE EU COMPETITION ENFORCER'S SCRUTINY	123			
		3.2.4	PARALLEL ANTITRUST AND FINANCIAL REGULATORY INVESTIGATIONS AND THE IMPORTANCE OF PRIVATE ENFORCEMENT	125			
		3.2.5	COMPETITION ASSESSMENT OF THE ANTITRUST CASES IN FINANCIAL MARKET INFRASTRUCTURE	126			
	3.3		ERGER CONTROL: A MECHANISM PROHIBITING MONOPOLISTIC ENTRATION STRUCTURES IN FINANCIAL MARKET INFRASTRUCTU	RE127			
		3.3.1	NYSE EURONEXT/DB FAILED MERGER: A POWERHOUSE IN TRADING AND CLEARING BENCHMARK EXCHANGE-TRADED DERIVATIVES THAT NEVER HAPPENED	128			
		3.3.2	LSE/DB: THIRD TIME WAS NOT THE CHARM FOR THE MERGER BETWEEN LSE AND DEUTSCHE BÖRSE				
		3.3.3	COMPETITION ASSESSMENT OF THE EU MERGER CONTROL IN FINANCIAL MARKET INFRASTRUCTURE	145			
		3.3.4	Broader Political Economy Considerations	145			
4.	TAKEAW	TAKEAWAY: IS IT TIME FOR AN INTERNATIONAL COMPETITION LAW SYSTEM AT					
	THE WT	O?		147			
5.	Brexit:	High St	TAKES FOR CLEARING SERVICES IN THE ANTICIPATION OF A NEW				
	ECONOM	IIC INTEC	GRATION MODEL	148			
	5.1		RAL COURT JUDGEMENT IN CASE T-496/11, UK V. ECB TION POLICY)	149			
	5.2	Way F	FORWARD FOR CLEARING SERVICES IN CASE OF HARD BREXIT	151			
	5.3		REVIEW: PROPOSED REFORMS REGARDING THE RINGHOUSES' LOCATION POLICY	153			
	5.4		ATIVE CONCLUSIONS ON CLEARING SERVICES – BEFORE BREXIT CTUALLY OCCURRED	156			
6.	CONCLUDING REMARKS						
PART	г V: Concl	USIONS A	AND POLICY RECOMMENDATIONS	159			
1.	Existing	G DISCIPI	LINES CONTRIBUTING TO THE LIBERALIZATION OF THE FINANCIA	L			
	Market	INFRAST	TRUCTURE	159			
2.	BARRIER	RS TO TRA	ADE IN THE WAY OF LIBERALIZING FINANCIAL MARKET				
= -			F	161			

3.	PROPOSALS TO ATTAIN FURTHER LIBERALIZATION		
	3.1	SUBSTANTIVE RECOMMENDATIONS	164
	3.2	PROCEDURAL RECOMMENDATIONS	166





LIST OF ABBREVIATIONS

ATS Automated Trading System

BIS Bank for International Settlements

BOE Bank of England

CCP Central Counter-Party

CDS Credit Default Swap

CETA Comprehensive Economic and Trade Agreement

CFTC Commodity Futures Trading Commission

CMS Collateral Management Services

CSD Central Securities Depository

DB Deutsche Börse

DOJ Department of Justice

DTCC Depository Trust & Clearing Corporation

ECB European Central Bank

EEA European Economic Area

EIA Economic Integration Agreement

EMIR European Market Infrastructure Regulation

ESCB European System of Central Banks

ESMA European Securities and Markets Authority

ETD Exchange Traded Derivatives

EU European Union

EURIBOR Euro Interbank Offered Rates

FCA Financial Conduct Authority

FRAND Fair, Reasonable, and Non-Discriminatory

FSB Financial Stability Board

GATS General Agreement on Trade in Services

GATT General Agreement on Tariffs and Trade

ICN International Competition Network

IOSCO International Organization of Securities Commissions

IRD Interest Rate Derivative

ISD Investment Services Directive

LFT Less Favourable Treatment

LIBOR London Interbank Offered Rate

LSE London Stock Exchange

MA Market Access

MAD Market Abuse Directive

MAR Market Abuse Regulation

MFN Most Favourable Treatment

MIFID Markets in Financial Instruments Directive

MIFIR Markets in Financial Instruments Regulation

MoU Memorandum of Understanding

NCA National Competition Authority

NSA National Supervisory Authority

NT National Treatment

NYSE New York Stock Exchange

OTC Over-the-Counter

PCO Prudential Carve-Out

REFIT Regulatory Fitness and Performance Program

Repos Repurchase agreements

SME Small and Medium Enterprise

TBT Trade Barriers to Trade

TEU Treaty of the European Union

TFEU Treaty on the Functioning of the European Union

T2S Target 2 Securities

UK United Kingdom

US United States

WTO World Trade Organization



LIST OF FIGURES

- Figure 1: Aggregate Clearing and Settlement Commitments in EIAs
- Figure 2: Level of Liberalization of Clearing and Settlement Commitments in EIAs over time
- Figure 3: WTO Members entering GATS+ Clearing and Settlement Commitments in EIAs
- Figure 4: WTO Members receiving GATS+ Clearing and Settlement Commitments in EIAs
- Figure 5: EIAs with the EU
- Figure 6: EIAs with the US
- Figure 7: Silo structure between CCPs and trading venues
- Figure 8: EMIR and MiFIR addressing the silo



LIST OF TABLES

- Table 1: EIAs under review
- Table 2: EIA comments on commitments in clearing and settlement services
- Table 3: EIAs excluding financial services
- Table 4: Commission's market overview
- Table 5: LSE and DB presence in various product classes along the EU financial infrastructure value chain
- Table 6: Clearing & Settlement Services Commitments in EIAs



LIST OF CITED CASE LAW

WTO Panel and Appellate Body Reports:

Panel Reports:

Panel Report, United States – Measures Affecting the Cross-Border Supply of Gambling and Betting Services, WT/DS285 (*US–Gambling*)

Panel Report, China – Measures Affecting Electronic Payment Services, WT/DS413 (*China–Electronic Payment Services*)

Panel Report, Mexico – Measures Affecting Telecommunications Services, WT/DS204 (*Mexico–Telecoms*)

Panel Report, European Union and its Member States – Certain Measures Relating to the Energy Sector, WT/DS476 (*EU – Energy Package*)

Panel Report, Argentina – Measures Relating to Trade in Goods and Services, WT/DS453 (*Argentina–Financial Services*)

Panel Report, Dominican Republic – Measures Affecting the Importation and Internal Sale of Cigarettes, WT/DS302, (Dominican Republic – Import and Sale of Cigarettes)

Panel Report, United States – Restrictions on Imports of Cotton and Man-Made Fibre Underwear, WT/DS24, (*US – Underwear*)

Panel Report, Argentina – Measures Affecting the Export of Bovine Hides and the Import of Finished Leather, WT/DS155, (*Argentina – Hides and Leather*)

Panel Report, European Communities and its Member States – Tariff Treatment of Certain Information Technology Products, WT/DS375, (*EC – IT Products*)

Panel Report, European Communities – Selected Customs Matters, WT/DS315 (*EC–Selected Customs Matters*)

Panel Report, United States – Anti-Dumping Measures on Certain Hot-Rolled Steel Products from Japan, WT/DS184, (*US – Hot-Rolled Steel*)

Panel Report, China – Measures Related to the Exportation of Various Raw Materials, WT/DS394, (*China – Raw Materials*)

Appellate Body Reports:

Appellate Body Report, European Communities – Regime for the Importation, Sale and Distribution of Bananas, WT/DS27 (*EC–Bananas III*)

Appellate Body Report, Canada – Certain Measures Affecting the Automotive Industry, WT/DS139 (*Canada – Autos*)

Appellate Body Report, United States – Measures Affecting Imports of Woven Wool Shirts and Blouses from India, WT/DS33 (*US – Wool Shirts and Blouses*)

Appellate Body, European Communities – Measures Affecting Asbestos and Products Containing Asbestos, WT/ DS135 (*EC – Asbestos*)

Appellate Body Report, US-Gambling,

Appellate Body Report, Argentina-Financial Services

Appellate Body Report, United States – Import Prohibition of Certain Shrimp and Shrimp Products, WT/DS58, (*US – Shrimp*)

Appellate Body Report, EC-Selected Customs Matters

Appellate Body Report, Thailand — Customs and Fiscal Measures on Cigarettes from the Philippines, WT/DS371 (*Thailand – Cigarettes (Philippines)*)

Appellate Body Report, European Communities – Measures Prohibiting the Importation and Marketing of Seal Products, WT/DS401 (*EC–Seal Products*)

Appellate Body Report, United States – Continued Existence and Application of Zeroing Methodology, WT/DS350, (*United States – Continued Zeroing*)

Appellate Body Report, European Communities – Export Subsidies on Sugar, WT/DS265 (*EC – Export Subsidies on Sugar*)

Appellate Body Report, Dominican Republic – Measures Affecting the Importation and Internal Sale of Cigarettes, WT/DS302, (*Dominican Republic – Import and Sale of Cigarettes*)

EU Courts jurisprudence and Commission Decisions:

Commission Decisions:

Commission Decision of 2 June 2004, Case COMP/38.096 – Clearstream (Clearing and Settlement)

Commission Decision of 21 October 2014, Case AT.39924 — Swiss Franc Interest Rate Derivatives) (Bid Ask Spread Infringement)

Commission Decision of 7 December 2016, Case AT.39914 — Euro Interest Rate Derivatives

Commission Decision of 29.3.2017, Case M.7995 –

DEUTSCHE BÖRSE / LONDON STOCK EXCHANGE GROUP

Commission Decision of 1.2.2012, Case No COMP/M.6166 – DEUTSCHE BÖRSE / NYSE EURONEXT

EU Court Judgements:

Clearstream Banking AG and Clearstream International SA v Commission, Case T-301/04, EU:T:2009:317

UK v. ECB (Location Policy), Case T-496/11, EU:T:2015:133

Ryanair Holdings v Commission, Case T-342/07, EU:T:2010:280

ICAP v Commission, Case T-180/15, EU:T:2017:795

ICAP V Commission, Case C-39/18 P, EU:C:2019:584

Société Generale v Commission, Case T-98/14, EU:T:2016:131

Deutsche Bahn and Others v Commission, Case C-583/13 P, EU:C:2015:404

Deutsche Bahn and Others v Commission, Case T-289/11, T-290/11 and T-521/11, EU:T:2013:404

Tetra Pak v Commission, Case T-83/91, EU:C:1996:436

Michelin v Commission, Case T-322/81, EU:C:1983:313

Hoffmann-La Roche & Co. AG v. Commission, Case 85/76, EU:C:1979:36

British Airways v Commission, Case C-95/04 P, EU:C:2007:166

Deutsche Post AG vs. GZS and Citicorp Kartenservice GmbH [2000] ECR I-825, Cases C-147/97 and C-148/97, EU:C:2000:74

HSBC Holdings v Commission, Case T-105/17; JP Morgan Chase v Commission, Case T-106/17; Crédit Agricole and Crédit Agricole Corporate and Investment Bank v Commission, T-113/17, EU:T:2019:675

U.S. Supreme Court case law:

Verizon Communications, Inc. v, Law Offices of Curtis V. Trinko, LLP

Aspen Skiing Company v. Aspen Highlands Skiing Corporation



LIST OF DISCUSSED LEGAL FRAMEWORKS

Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, Pub. L. No. 111-203, Title VII (codified in sections of 7 USC and 15 USC)

EMIR, Regulation (EU) No. 648/2012 of the European Parliament and of the Council of 4 July 2012 on OTC derivatives, central counterparties, and trade repositories

General Agreement on Trade in Services ("GATS")

General Agreement on Tariffs and Trade ("GATT")

Directive 2014/57/EU of the European Parliament and of the Council of 16 April 2014 on criminal sanctions for market abuse (market abuse directive) L 173/179, and Regulation (EU) No 596/2014 of the European Parliament and of the Council of 16 April 2014 on market abuse (market abuse regulation L 173/1

MiFIR, Regulation (EU) No 600/2014 of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments

Treaty on the Functioning of the European Union ("TFEU")

Commission Regulation (EC) No. 773/2004

Regulation (EU) 2016/1011 of the European Parliament and of the Council of 8 June 2016 on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds L 171/1

Council Directive 2014/104/EU of 26 November 2

Council Regulation (EC) No 139/2004 of 20 January 2004 on the control of concentrations between undertakings (the EC Merger Regulation) (Text with EEA relevance)

Regulation (EU) No 909/2014 of the European Parliament and of the Council of 23 July 2014 on improving the securities settlement in the European Union and on central securities depositories



PART I: SUBJECT MATTER OF THE THESIS

1. Introduction

In the aftermath of 2008 financial crisis, the role of financial market infrastructure has emerged at the forefront of important commercial, regulatory, legislative, and political debates. The institutions that are part of financial market infrastructure are: (i) stock exchanges and regulated securities markets – such as Euronext, New York Stock Exchange ("NYSE"), NASDAQ, and Hong Kong Stock Exchange, (ii) central counterparties ("CCPs" also referred to as clearinghouses)¹ – such as Eurex Clearing, LCH.Clearnet, ICE Clear Europe, and Japan Securities Clearing Corporation, and (iii) central securities depositories ("CSDs") – such as Clearing Banking AG, the Depository Trust & Clearing Corporation ("DTCC"), the Canadian Depository for Securities, and Switzerland's SIX Securities Services. These institutions are seminal for the operation of financial markets globally as they ensure their efficiency, safety, soundness and they contribute to furthering economic development.

The scope of this thesis, principally, focuses on the new systemic role central counterparties have acquired and, accordingly, evaluates the interplay between the regulation thereof in different economic integration settings. In the wake of the financial crisis, CCPs have been tasked with mitigating the perils attached to the trading of over the counter ("OTC") derivatives in the global financial system. OTC derivatives have been largely responsible for the effects of the recent financial crisis as they contributed to the buildup of systemic risk in financial markets prior to 2007 and spread volatility during the crisis. Notably, those financial instruments played a crucial role in proliferating the risks of the US subprime mortgage market to financial markets across the globe.² This coupled with financial markets' interconnectedness, insufficient supervision and inadequate regulation resulted in amplifying the crisis' detrimental effects.³

For the purposes of this thesis, the terms clearinghouses and central counterparties (or CCPs) are used interchangeably.

For literature on this subject, see, for example, James Bullard, Christopher Neely, & David Wheelock (2009). Systemic risk and the financial crisis: a primer. Federal Reserve Bank of St. Louis Review, 91(September/October 2009); Michael Greenberger (2010). The role of derivatives in the financial crisis. Testimony before the Financial Crisis Inquiry Commission; Myron Scholes (2010). Regulating Wall Street: The Dodd-Frank Act and the new architecture of global finance (Vol. 608); John Wiley & Sons; Simon Grima (2012). The current financial crisis and derivative misuse. Online Journal of Social Sciences Research, 1(8), 265-276.

In respect of the complementary grounds that supported the exacerbation of the effects of the crisis, see, inter alia, Stijn Claessens, Aydan Kose, Luc Laeven & Fabian Valencia (2014). Financial crises: Causes,

This thesis discusses the interface between the regulation of clearinghouses (as one of the most prominent post-crisis financial market infrastructure institutions), on the one hand, and economic integration law from a WTO and EU competition law perspective, on the other, within the context of the post crisis regulatory environment. This study aims to identify the obstacles and opportunities in the liberalization of financial market infrastructure.

Academic literature developed in the wake of the crisis on both sides of the Atlantic has focused its attention to the economic importance that central counterparties have gained in financial markets and has scrutinized the legislative frameworks regulating their operation. However, scholarship has neglected the role and prominence of financial market infrastructure, in general, and clearinghouses in particular, in legal systems of economic integration. Surprisingly, scholars so far have not payed attention to the elements of international economic law setting out specific disciplines for financial market infrastructure and the extent to which these rules are compatible and work along the same lines as financial regulatory systems.

This thesis purports to remedy this *lacuna* by precisely filling this gap in literature. The forthcoming paragraphs spell out how this thesis aims to evaluate the relationship between the regulation of financial market infrastructure and economic and the concrete case studies deployed in this endeavor. Importantly, the obstacles and driving forces of the liberalization of financial market infrastructure are identified as the result of this thesis' analysis.

Next, the research question and the methodology of this thesis are explained.

2. RESEARCH QUESTION

The research question of this thesis investigates, on a fist level, the interplay between the regulation clearinghouses, on the one hand, and the law of economic integration, on the

consequences, and policy responses. International Monetary Fund; James Crotty, & Gerald Epstein (2008). Proposals for effectively regulating the US financial system to avoid yet another meltdown (No. 2008-15). Working Paper.

See, for example, Yesha Yadav (2014). Clearinghouses and regulation by proxy. Ga. J. Int'l & Comp. L., 43, 161; Mark J. Roe (2013). Clearinghouse overconfidence. Calif. L. Rev., 101, 1641; Julia Lee Allen. (2012). Derivatives clearinghouses and systemic risk: a bankruptcy and Dodd-Frank analysis. Stan. L. Rev., 64, 1079; Stephen J. Lubben (2015). Failure of the Clearinghouse: Dodd-Frank's Fatal Flaw. Va. L. & Bus. Rev., 10, 127; Hester Peirce (2015). Derivatives Clearinghouses: Clearing the Way to Failure. Clev. St. L. Rev., 64, 589; Fernando Cerezetti V., Emmanouil N. Karimalis, Ujwal Shreyas & Anannit Sumawong (2019). Market liquidity, closeout procedures and initial margin for CCPs. The European Journal of Finance, 25(7), 599-631; Marco Lamandini, (2018). Recovery and Resolution of CCPs: Obsessing over regulatory symmetry? (No. 13808). Centre for European Policy Studies; Olly Jackson, (2018). Could EU go down the equivalence route for London CCPs?. International Financial Law Review; Pierre Schammo (2018). Caught in a cross-fire? the US CFTC and the European Commission's proposals on third-country CCPs. Company lawyer., 39(9), 277-278.

other. On a second level, this thesis explores the extent to which a more-harmonious relationship between the two systems is feasible and how it can be achieved. The liberalization of financial market infrastructure is the common denominator in the analysis of both disciplines. Consequently, the analysis underscores all the parameters relevant to promoting or discouraging such liberalization.

On the one hand, financial regulation sets forth the rules on how financial institutions carry out their business both at the national and international level, among other things. There are occasions, as discussed above, where financial regulation in the name of the stability of financial systems extends an extraterritorial reach – meaning, most commonly, that it does not only regulate domestic institutions but also scrutinizes the business of institutions authorized abroad. The principal considerations of financial regulation is the preservation of financial stability, through the avoidance of negative externalities and market failures for instance, and economic development. Accordingly, financial regulation is tasked with safeguarding a sensitive balance between achieving or contributing to economic growth, by i.e. stimulating capital markets and increasing liquidity, and avoiding the realization of financial turbulence scenarios, by i.e. monitoring systemically important financial institutions.

On the other hand, legal systems of economic integration, and most importantly, the law of the World Trade Organization ("WTO"), seek – after the General Agreement on Tariffs and Trade ("GATT") era – to further integrate the economics of different States with the objective of attaining higher growth and higher levels of economic development for the parties of such international treaties. In this endeavor, the laws of economic integration aim to liberalize the markets for the international trade in goods, services, and intellectual property. Notably, the WTO legal frameworks on economic integration are comprehensive and they include specific set of rules for the supply of financial services, including the services pertinent to the provision of financial market infrastructure. Importantly, the General Agreement on Trade in Services ("GATS") puts forward a thorough framework for trade in financial services that domestic financial regulatory systems of WTO Members have to abide by. It emanates from this, that legal systems of economic integration at the WTO have their own mechanics for the supply of financial services that directly interact with domestic financial regulation.

Investigating the relationship between the legal disciplines of financial regulation (as a form of domestic law) and economic integration (as part of the international law order) is quintessential to grasp that the two ostensibly separate legal orders are in a constant interplay.

The relationship between the two systems determines the level of liberalization of financial markets and, therefore, it is crucial to understand that the better they interconnect the higher the likelihood of more integration. This thesis discusses the interaction between the two disciplines in the context of three case studies. Namely, in the context of WTO law, Economic Integration Agreements, and EU economic law.

Principally, we extrapolate that there is much room in the way of further integrating financial market infrastructure and we underscore the obstacles and opportunities of such integration. The findings of this thesis concretely identify the obstacles in the liberalization of financial market infrastructure for each case study, which may not be justified under the pretext of financial stability. In addition, the examination of the interplay between the two legal frameworks in the context of Economic Integration Agreements reveals the existence of shortcomings, in the form of silos, possibly generated by the absence of proper institutional channels for the better coordination of the two. Importantly, this study's findings portray what elements are of the essence in liberalizing financial market infrastructure (i.e. the existence and application of competition law in the EU economic integration model). Exploring this interface is a delicate exercise that requires careful considerations of all the elements relevant to both systems in order to draw firm and legally solid conclusions.

As to the relevant economic aspects, financial market infrastructure institutions tend to provide their services in networks and as such, network effects characterize their industry. The intrinsic characteristics of network industries, in comparison to other types of markets, are (i) consumption externalities, (ii) switching costs and lock-in effects, (iii) significant economies of scale and production, and (iv) complementarity, comparability and standards.⁵ In addition, another market element closely related to the provision of financial infrastructure services is the existence of large sunk costs. This type of costs are expenses that a company needs to incur to enter a market, but cannot recover it if it exits the market. The importance of sunk costs lies with the fact that can stop a market from being contestable.⁶ This thesis bears in mind these elements to the extent that they serve its analytical framework.

_

⁵ See Oz Shy, (2001), *The economics of network industries*, Cambridge University Press.

⁶ For a thorough analysis of contestable markets, see William J. Baumol, & John C. Panzar & Robert D. Willig (1982), *Contestable Markets and the Theory of Industry Structures*, New York.

3. METHODOLOGY

To approach the subject matter of this thesis in a rigorous fashion and to capture all the nuances associated with the interface between the regulation of financial market infrastructure, on the one hand, and legal systems of economic integration, on the other, we have decided to select three case studies that serve this objective. In particular, this study's inquiry is assessed through the lenses of:

- (a) WTO law, to evaluate the tension between the two systems at the multilateral trading system;
- (b) Economic Integration Agreements ("EIAs") that liberalize trade in financial market infrastructure services, to assess how the development of plurilateral trade agreements accommodates the relationship between financial regulation and economic integration; and
- (c) European Union ("EU") economic law, exemplified by the use of harmonized regulatory frameworks and competition law, as the most representative model of deep economic integration among different States.

These three case studies have been selected due to their prominence in the liberalization of financial market infrastructure and their overall importance as economic integration legal systems. Additionally, these case studies are essential to underscore that the transnational supply of financial infrastructure services, and, accordingly, the legal system that surrounds such services, hinges on the terms and conditions of the economic integration model that the transacting parties are subject to. The next paragraphs explain the specific methodological steps undertaken in each of the selected case studies.

In assessing the tension of the regulation of financial market infrastructure at the multilateral trading system, we examine the consistency of the EU regulation on clearinghouses with WTO law. That is because (i) of the importance of CCPs to the post-crisis overhaul of financial markets, (ii) the failure of existing literature to evaluate their role in international economic law, and (ii) the truly international nature of clearing derivatives. To that end, we, first, examine the current European regulatory framework for "third country" clearinghouses. This is a necessary first step in order to understand the terms and conditions the EU regulation employs for the transnational trade in clearing services. Further, we venture into examining the conformity of the European regime with the GATS relevant obligations and commitments.

For the purposes of this inquiry, the consistency of the EU regulatory framework is tested under the GATS most favourble treatment ("MFN") provision, the prudential carve-out housed in the Annex of the GATS, and the GATS provisions on domestic regulation and mutual recognition. Finally, we draw conclusions on how further liberalization of financial market infrastructure can be attained at the WTO.

Moreover, given the importance of regionalism in the integration of global markets over the last decades, ⁷ the second case study sheds light on how the liberalization of financial market infrastructure services, and in particular securities' clearing and settlement services, is attained at the plurilateral trading system. To achieve this, this study comprehensively maps out how the commitments for clearing and settlement services entered in EIAs compare and contrast with the liberalization of those services at the multilateral trading system. An empirical analysis is employed in Chapter III to capture the intricacies embedded in EIAs and to measure the liberalization of financial market infrastructure in plurilateral trade agreements in comparison to the WTO benchmark. This methodological approach serves the thesis' broader objective of assessing the interplay between financial regulation and economic integration – in the context of the plurilateral trading system. In brief, as financial market infrastructure services are provided through mode 1 (cross-border supply), mode 2 (consumption abroad), and mode 3 (establishment), the commitments undertaken for market access and national treatment are the key factors for gauging liberalization. The analysis of this case study relies on the findings based on measuring the liberalization of clearing and settlement service in EIAs. In this analytical framework, relevant aspects of the role of national financial regulations are factored in. As a result, the relevant political economy pertinent to the liberalization of financial market infrastructure is highlighted and the driving factors behind the liberalization of these services are identified.

As the third case study, we explore how the liberalization of financial market infrastructure is achieved at the EU level because it is one of the deepest economic integration systems we have witnessed globally. The EU integration model is vested with some unique elements that represent its "comparative advantages" in the liberalization of markets, the most

_

Especially since negotiations at the WTO level have been stagnating, the role of the plurilateral trading system has become more prominent. For relevant literature, see *inter alia* Michitaka Nakatomi (2013). Plurilateral Agreements: A viable alternative to the WTO?. The Future of the World Trading System: Asian Perspectives; Bernard M. Hoekman & Petros C. Mavroidis (2015). Embracing diversity: plurilateral agreements and the trading system. *World Trade Review*, 14(1), 101-116; Bernard M. Hoekman & Petros C. Mavroidis (2015). WTO 'à la carte'or 'menu du jour'? Assessing the Case for More Plurilateral Agreements. *European journal of international law*, 26(2), 319-343.

prominent of which is no other that the application of competition law. Consequently, we discuss the importance of EU competition and antitrust law for the liberalization of financial market infrastructure services. In addition, the EU model is the only example where the objectives of financial regulation are closely aligned with its economic integration tools, all aiming at further integrating financial market infrastructure. Nevertheless, the analysis of this case study cannot disregard the role of Brexit and, therefore, the relevant elements pertinent to the liberalization of financial market infrastructure and the relationship between integration and financial regulation are borne in mind, to the extent possible.

Overall, the above-stated methodological steps are necessary to extrapolate where the barriers to the liberalization of financial market infrastructure lie. This thesis' analysis aims to promulgate concrete policy recommendations as to what elements could contribute to realizing further liberalization of the relevant markets by striking a closer and more-harmonious relationship between the two disciplines – namely, between financial regulation and economic integration.

4. THE STRUCTURE OF THIS THESIS

This thesis develops as follows: Part II sets out the legal framework of the of the EU financial regulation on clearinghouses and investigates its consistency with the GATS in order to identify the tension in the interface between the two disciplines. Importantly, WTO law has delegated sufficient legislative leeway to financial regulators, but, at the same time, it stipulates specific obligations and commitments that WTO Members shall comply with. The analysis is developed taking account of this background and aims to underscore possible ways forward for the liberalization of financial services at the multilateral trading system

In Part III, the liberalization of financial market infrastructure services (in specific, securities' clearing and settlement) in Economic Integration Agreements is assessed. By identifying the liberalizing patterns of financial infrastructure services in the plurilateral trading system, we aim to pin down the degree to which the systems of financial regulation and international trade law work together.

Further, Part IV discusses how the liberalization of financial market infrastructure has been attained in the EU, through the integration of elements of financial regulation and competition law. This economic integration model offers deeper integration than the other two

and we aim to underline how the EU's "comparative advantages" contribute to further integrating the markets for financial market infrastructure.

Finally, Part V concludes the work. Having concretely identified obstacles and opportunities in the way of financial market infrastructure liberalization, this thesis, therefore, suggests possible paths and policy recommendations that can be followed should states decide to further integrate their financial infrastructure.

PART II: FINANCIAL REGULATION AND WTO LAW

Assessing the GATS-consistency of the EU 'third country equivalence' rules for clearinghouses

1. INTRODUCTORY REMARKS

In the aftermath of the 2008 global financial crisis, the European Union regulators introduced the mechanism of 'third-country equivalence' for non-European financial institutions to access the EU internal market. This *Chapter* evaluates for the first time the GATS-consistency of the European rules on third-country clearinghouses. Through this exercise, the article sheds light on the tension between financial regulation and WTO law, exploring how these two different disciplines can be reconciled. Building on the international economic law principles of non-discrimination and transparency, the analysis reveals that the European financial regulation could negatively impact the access of smaller countries to the EU market. The regulation in question is assessed under the GATS Article VI (Domestic Regulation), Article II (Most-Favoured Nation ("MFN")), Article VII (Recognition), and the Annex on Financial Services prudential carve-out ("PCO").

The findings of this European case study indicate that the vast flexibility that trade law has delegated to national regulators possibly has adverse effects on the liberalization of financial services. The *Chapter* concludes that if WTO Members do not derogate from their GATS obligations and commitments, the stability of the financial system would not be jeopardized, while the prospect of international integration would be increased

The remainder of this *Chapter* explores the interface between international integration of financial services and domestic regulation.⁸ Financial services are traded internationally,

_

For general literature on the interplay between financial regulation and international economic law, see Chris Brummer, (2010). Why soft law dominates international finance—and not trade. *Journal of International Economic Law*, *13*(3), 623-643; Chris Brummer, (2010). How international financial law works (and how it doesn't). *Geo. LJ*, *99*, 257; Thomas Cottier, & Marcus Krajewski, (2010). What Role for Non-Discrimination and Prudential Standards in International Financial Law?. *Journal of international economic law*, *13*(3), 817-835; Kern Alexander, (2008). Global financial standard setting, the G10 committees, and international economic law. *Brook. J. Int'l L.*, *34*, 861; Regis Bismuth, (2010). Financial sector regulation and financial services liberalization at the crossroads: The relevance of international financial standards in WTO law. *Journal of World Trade*, *44*(2), 489-514; Panagiotis Delimatsis, & Pierre Sauvé, (2010). Financial services trade after the crisis: Policy and legal conjectures. *Journal of International Economic Law*, *13*(3), 837-857; Panagiotis Delimatsis, (2012). Financial innovation and prudential regulation: The new Basel III rules. *Journal of World Trade*, *46*(6), 1309-1342; Panagiotis Delimatsis, (2013). Transparent financial innovation in a post-crisis environment. *Journal of International Economic Law*, *16*(1), 159-210; Panagiotis Delimatsis, & Nils Herger, (Eds.). (2011). *Financial regulation at the crossroads: Implications for supervision, institutional design and trade*. Kluwer Law International BV; Bart De Meester, (2010). The

but regulated on the national level. The tension between trade integration and national sovereignty is especially hard to reconcile in the area of financial services. This comes as the result from the multiple aims financial regulation seeks to achieve: alleviate information asymmetries, market failures, and negative externalities. A thin line exists between protectionist measures, which seek to stave off foreign competition for instance, and measures that serve legitimate objectives Defining the extent international trade law affects domestic financial regulation and, subsequently, challenging financial regulatory measures, is a delicate exercise. The contribution of this *Chapter* aims to highlight the benefits of striking a balance between the two disciplines – financial regulation and international trade law – and uses clearinghouses of over-the-counter ("OTC") derivatives as a case study.

2. EU LEGAL FRAMEWORK AND FUNCTIONS OF CCPS

At the outset, the role of clearinghouses in the financial market infrastructure landscape is introduced to pave the way for the forthcoming analysis of the conformity of the EU regulation with WTO law. Clearinghouses, also known as central-counterparties, are entities that mitigate systemic risk and increase financial stability by inserting themselves between the parties to derivative transactions. Clearinghouses are used for the back-office processing or 'plumbing' of securities; this taking place after a trade is agreed and before it is settled. In particular, CCPs clearing swifts the allocation of performance risk that is endemic to derivatives trading. Traditionally, in OTC derivative transactions, the original counterparties bear the risk of potential failure of each other to perform on their obligations for the contract's

_

Global Financial Crisis and Government Support for Banks: What Role for the GATS?. *Journal of International Economic Law*, 13(1), 27-63.

The objectives and mechanics of financial regulation are well-developed in David T Llewellyn T. (1999). *The economic rationale for financial regulation*. London: Financial Services Authority. See also Charles Goodhart, Philippe Hartmann, David T. Llewellyn, Liliana Rojas-Suarez, & Steven Weisbrod (2013). Financial regulation: Why, how and where now?. Routledge, and Markus Brunnermeier, Andrew Crockett, Charles A. Goodhart, Avinash Persaud, and Hyun Song Shin. (2009). The fundamental principles of financial regulation (Vol. 11). ICMB, International Center for Monetary and Banking Studies.

See, inter alia, Alan Sykes, 'Regulatory Protectionism and the Law of International Trade', University of Chicago Law Review, 66(1) (1999), 15–33; Frederik Erixon, & Razeen Sally, (2010). Trade, globalisation and emerging protectionism since the crisis (No. 02/2010). ECIPE working paper; Richard E. Baldwin, John McLaren, & Arvind Panagariya, (2000). Regulatory protectionism, developing nations, and a two-tier world trade system [with comments and discussion]. In Brookings trade forum (pp. 237-293). Brookings Institution Press.

For scholarship on the role of CCPs in the aftermath of the crisis, see, for instance, Amandeep Rehlon, & Dan Nixon (2013). Central counterparties: what are they, why do they matter, and how does the Bank supervise them? Bank of England Quarterly Bulletin, Q2; Froukelien Wendt, (2015). Central counterparties: addressing their too important to fail nature (No. 15-21); International Monetary Fund; Cyril Monnet, (2010). Let's make it clear: How central counterparties save (d) the day. Federal Reserve Bank of Philadelphia Business Review, 1, 1-10.

duration. Contrary to such bilateral trades, when contracts are cleared by CCPs the original counterparties' contracts with one another are replaced with a pair of contracts with a CCP. The CCP acts as the buyer to every seller and as the seller to every buyer. In the event that a buyer or seller cannot fulfil its obligations and/or becomes bust, the central counterparty is vested with the responsibility to pay all that is owed to the non-defaulting party. Clearinghouses have at their disposal a number of financial resources, including collateral pledged by those who clear *via* CCPs and financial commitments made by its members and owners, all of which are prescribed in regulatory frameworks in support of financial stability.

For decades clearinghouses have been widely used for options and futures traded in exchanges (or other trading venues). However, the regulatory measures that were crafted in the aftermath of the 2009 financial crisis, such as Dodd-Frank in the U.S. and EMIR in the EU, significantly increase the volume of cleared transactions and require that the majority of OTC transactions to be cleared. This regulatory change represents a game-changer in the functioning of financial market infrastructure. Inportantly, the CCPs primary tasks are (i) confronting counterparty credit risk, (ii) reducing systemic risk, and (iii) developing loss-sharing structures.

Those tasks are briefly discussed in turn: clearinghouses address beyond any doubt counterparty credit risk as they interpose themselves between contractual counterparties and assume their responsibilities in case one of the two cannot fulfil their part of the deal – similar to an insurance company. Further, as to the loss-sharing features that the regulation of CCPs puts forward, a number of measures, such as member contributions to the default fund, are introduced for the members of clearinghouses in order to create a mechanism that would be capable to withstand potential failures of entities without generating spillover effects to other market actors (and members) and endangering the efficacy of the CCP.¹⁶ Finally, as to the issue of CCPs counteracting systemic risk, academic literature has sufficiently investigated

-

See Craig Pirrong, 'The Economics of Central Clearing: Theory and Practice (ISDA, Discussion Paper Series No. 1, 2011), p. 5-6.

Counterparty credit risk or simply counterparty risk refers to the risk of a party's default or insolvency in a derivative contract before final settlement.

See Felix B. Chang, 'The Systemic Risk Paradox: Banks and Clearinghouses under Regulation', *Columbia Business Law Review* (2014), 14–06, p.747.

See Craig Pirrong, 'The Economics of Central Clearing: Theory and Practice (ISDA, Discussion Paper Series No. 1, 2011), pp. 6–11, 30–34, available here: www2.isda.org/functional-areas/research/discussion-papers/.

¹⁶ Central counterparties would still have "*skin in the game*" to avoid situations of moral hazard in default waterfall situations.

whether clearinghouses are apt to succeed in carrying out this task. Importantly, CCPs contribute to the stability of financial systems with their functions but a potential failure of themselves could negatively impact on the integrity of financial systems. That is why financial regulators are currently devising rules in order to set the framework for the recovery and resolution of clearinghouses.¹⁷

Following the G20 mandate to increase transparency and reduce risks in OTC derivative markets, ¹⁸ clearinghouses have emerged at the center of policymakers' post-crisis reform agendas. With respect to the relevant context that marked the advent of clearinghouses' regulatory overhaul, in order to beef up the international financial regulatory system G20 undertook to ameliorate the OTC derivatives markets: *All standardized OTC derivative contracts should be traded on exchanges or electronic trading platforms, where appropriate, and cleared through central counterparties 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. ¹⁹ Central counterparties are in the epicenter of this pledge as they are expected to harness international OTC derivative markets valued at 544 trillion US dollars in the second half of 2018. ²⁰ This is why clearinghouses have been called 'super systemically important' institutions with their role being seen as pivotal in the post-crisis financial architecture. ²²*

Explaining the role of clearinghouses in global financial networks involves considerations of international standard-setting bodies and their regulatory proposals,²³ market

_

See, for example, the European Commission Proposal for a Regulation of the European Parliament and of the Council on a framework for the recovery and resolution of central counterparties, available here: https://eurlex.europa.eu/legal-content/EN/TXT/DOC/?uri=CELEX:52016PC0856&from=EN.

G20 leaders gathered to confront the challenges of the 2008 financial crisis. See www.g20.utoronto.ca/2009/2009communi que0925.html, para. 13.

¹⁹ Ihid

Bank for International Settlements, Statistics: OTC Derivatives, Semiannual OTC Derivatives Statistics, https://www.bis.org/publ/otc_hy1905.htm.

This term was used by Benöit Coeuré (ECB) at the Federal Reserve Bank of Chicago Symposium on Central Clearing (10 April 2015).

J. Rennison and P. Staffford, 'Reforming the Derivatives Market: An Explainer', Financial Times (22 September 2016), available here: www.ft.com/content/6b5e97e0-7029-11e6-9ac1-1055824ca907.

International standards for the regulation of CCPs exist but fall short of generating uniformity among national regimes and facilitating international trade flows. The recognition of third countries' regimes is key to attaining market access to foreign jurisdictions. Nonetheless, these standards put forward good-governance principles for financial market infrastructure regulations. See Bank for International Settlements & IOSCO,

structure analyses for different financial products, major financial centers' legal regimes (like EU and US),²⁴ the operation of market participants, and WTO law among others. This contribution investigates the European clearinghouse regulation from an international economic law perspective. In addition, it touches on the surrounding issues but only to the extent that they serve its analytical framework.

The European Market Infrastructure Regulation ("EMIR")²⁵ raises issues on how international integration in the field of clearing derivatives is to be achieved and we use it as a case study to test the conformity of its prudential rules with WTO law. One may wonder to what degree European financial regulation and its application encroach on the opportunities of 'third-country' clearinghouses which aim to provide their services in the European market. Additionally, the rationale behind financial regulation and international trade law often differs significantly despite the fact that they regulate the same activities. Clarifying their relationship is one of the *Chapter*'s goals.

Notably, the examination of clearinghouses is crucial due to (i) their importance to the post-crisis reform of financial markets, (ii) the failure of existing literature to assess their role in international economic law, and (iii) the transnational nature of clearing OTC derivatives. In practical terms, when an international clearinghouse enters a derivatives transaction with market participants from other jurisdictions, they will engage multiple sets of rules that will likely include the WTO's rules for trade in financial services. Trade in financial services constitutes a significant part of international trade (particularly for the EU and the US) and the WTO offers its own legal system that places national legislations under scrutiny, provided commitments have been assumed.

^{&#}x27;Principles for Financial Market Infrastructures' (2012), available here: www.bis.org/cpmi/publ/d101a.pdf. See Juan A. Marchetti (2015) Technical standard-setting in the financial sector. In Panagiotis Delimatsis (Ed.), *The Law, Economics, and Politics of International Standardisation* (Cambridge International Trade and Economic Law, pp. 137-159). Cambridge: Cambridge University Press.

The regime of 'substituted-compliance' in the US is similar to the EU one, see Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, Pub. L. No. 111-203, Title VII (codified in sections of 7 USC and 15 USC). For an analysis of the EU and US recongition regimes of equivalence and substituted compliance, see Yesha Yadav and Dermot Turing, 'The Extraterritorial Regulation of Clearinghouses', *Journal of Financial Regulation*, 2(1) (2016), 46–52; Yesha Yadav. (2012). The problematic case of clearinghouses in complex markets. *Geo. LJ*, 101, 387.

Regulation (EU) No. 648/2012 of the European Parliament and of the Council of 4 July 2012 on OTC derivatives, central counterparties, and trade repositories, available here: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32012R0648&from=EN.

International integration in financial services is facilitated by the General Agreement on Trade in Services ("GATS").²⁶ The research question we address in this *Chapter* is how may international trade law scrutinize the European rules on clearinghouses. On a broader level, we question the degree to which trade has the potential means to further financial services liberalization. Investigating this subject matter is of relevance to anyone interested in how international economic law (the GATS) and financial regulation (exemplified by the European rules) relate to each other. The analysis suggests that the two disciplines are in conflict and explores whether a closer relation that furthers the interests of both is feasible. The writer answers in the affirmative, so long as WTO Members (hereinafter Members) re-evaluate their approach to trade norms.

The structure of this *Chapter* is as follows: Section 2 examines the European regulatory framework for 'third-country' clearinghouses to set the scene. Section 3 explains the basic features of trade in financial services architecture of the GATS. Next, Section 4 ventures into testing the GATS consistency of the European regime to evaluate the tension between the two disciplines. To that end, the analysis builds on the principles of non-discrimination and transparency in the light of Domestic Regulation (GATS Article VI), MFN (GATS Article II), Recognition (GATS Article VII), and the prudential carve-out (Annex on Financial Services paragraph 2(a)). Examining the European regulation's conformity with the relevant GATS provisions is essential to establish how financial policy objectives can be reconciled with trade disciplines and, subsequently, contribute to international integration. Finally, Section 5 offers preliminary conclusions.

3. THE EUROPEAN REGIME FOR THIRD-COUNTRY CLEARINGHOUSES

In response to the G20 agreement, the European Commission drafted a proposal for regulating CCPs since they have turned into 'systemic market infrastructure' in the financial system.²⁷ Subsequently, EMIR came into play in 2012. EMIR is currently under revision.²⁸ Some of the new proposed features, such as the location policy for third-country systemically important CCPs, present interesting angles for the scope of this thesis. However, since the

-

GATS, Annex 1B to the Agreement Establishing the WTO. See WTO, The Results of the Uruguay Round of Multilateral Trade Negotiations: The Legal Texts (Cambridge: Cambridge University Press, 2017), at 357.

See European Commission – Press Release, 13 March 2019, Capital markets: agreement on more robust supervision of central counterparties, available at: https://europa.eu/rapid/press-release IP-19-1657_en.htm.

EMIR II passed the plenary vote of the European Parliament last summer and is currently at the trilogue legislative stage. For more information on the legislative procedure, see www.europarl.europa.eu/RegData/etudes/BRIE/2017/603983/ EPRS_BRI(2017)603983_EN.pdf.

rules on third-country clearinghouses have not been amended yet, the analysis of this *Chapter* focusses on the WTO law consistency of the existing rules. The elements of EMIR II – on the basis of the existing proposal – that are of the essence for the analytical framework of this thesis are discussed in *Chapter IV*, where the analysis between financial regulation and competition law under the European Union economic model is unravelled.

The EMIR's provisions connected to international trade in clearing derivatives are examined to set the scene for the subsequent WTO law analysis. Specifically, the rules associated with a clearinghouse established outside the European Union ("EU") providing its service to European market participants. Not surprisingly, the European regulation and EU executive agencies exercise thorough checks and balances for assessing the eligibility of clearinghouses from third-countries. This is conducted through the EU rules on equivalence. As OTC derivatives markets rely heavily on the functioning of clearinghouses, it is sensible for financial authorities to evaluate whether foreign CCPs comply with their own prudential rules. Due to the transnational nature of derivatives markets, different regulatory frameworks can generate disruptions in international trade-flows by increasing transaction costs and undermining the efficient allocation of funds.²⁹

_

For a primer on the interests at stake regarding potential disruptions by regulatory clearing rules after Brexit, see P. Stafford, 'US Derivatives Regulator Warns EU over Clearing Plans', Financial Times (2018), www.ft.com/content/ fc95e500-0172-3b00-8404-6319ebc52c69.

3.1 THE 'EQUIVALENCE' RULES

Clearinghouses from non-European countries can provide clearing services in the EU after they have been recognized by the European Securities and Markets Authority ("ESMA").³⁰ Pursuant to EMIR Article 25, the criteria to be fulfilled are the following:

- (a) that the CCP shall be authorized in its home country, and 'is subject to effective supervision and enforcement ensuring full compliance with the prudential requirements applicable in that third country';³¹
- that the European Commission furnishes its equivalence assessment;³² (b)
- that the anti-money laundering and financing of terrorism laws in the third (c) country are equivalent to the ones of the EU;33 and
- (d) that the regulatory authority of the third-country has concluded cooperation arrangements with ESMA.34

ESMA is an independent EU authority that contributes to safeguarding the stability of the European Union's financial system and seeks to enhance the protection of investors and to foster stable and orderly financial markets. ESMA was established by Regulation (EU) No 1095/2010 of the European Parliament and of the Council of 24 November 2010. For literature on ESMA, see Niamh Moloney, (2011). I. Reform or Revolution? The Financial Crisis, EU Financial Markets Law, and The European Securities and Markets Authority. International & Comparative Law Quarterly, 60(2), 521-533; Pierre Schammo, (2011). The European Securities and Markets Authority: lifting the veil on the allocation of powers. Common Market Law Review, 48(6), 1879-1913; and Niamh Moloney, (2011). The European securities and markets authority and institutional design for the EU financial market-a tale of two competences: part (1) rule-making. European Business Organization Law Review (EBOR), 12(1), 41-86; Niamh Moloney, (2011). The European securities and markets authority and institutional design for the EU financial market-a tale of two competences: part (2) rules in action. European Business Organization Law Review (EBOR), 12(2), 177-225.

EMIR, Art. 25 (2) (b).

EMIR, Art. 25 (2) (a). Additionally, the actual wording is of significance, see EMIR Art. 25(6): The Commission may adopt an implementing act under Article 5 Regulation (EU) No. 182/2011, determining that the legal and supervisory arrangements of a third country ensure that CCPs authorized in that third country comply with legally binding requirements which are equivalent to the requirements laid down in Title IV of this Regulation, that those CCPs are subject to effective supervision and enforcement in that third country on an ongoing basis and that the legal framework of that third country provides for an effective equivalent system for the recognition of CCPs authorized under third-country legal regimes. It is deduced from that provision that the Commission's assessment of third-countries' regulatory frameworks is threefold.

EMIR, Art. 25 (2) (d).

EMIR, Art. 25 (2) (c). ESMA and third-country securities regulatory authorities conclude Memoranda of Understanding ("MoU") that establish cooperation arrangements between the signatory atuthorities regarding clearinghouses that are established outside the EU and have applied for recognition under EMIR. Those MoU are established under EMIR, which provides for cooperation arrangements to be established between ESMA and third-country authorities whose legal and supervisory frameworks for central-counterparties have been deemed equivalent to EMIR by the European Commission. The rationale behind the conclusion of MoU is to (i) ensure compliance with Article 25(2)(c) of EMIR, and (ii) to provide ESMA with adequate flexibility to assess the ongoing compliance by the underlying CCPs with the recognition criteria housed in Article 25 of EMIR. For an example of a cooperation arrangement, see the MoU between ESMA and the Monetary Authority Singapore, available here:

In terms of procedure, the European Commission requests that ESMA provides technical advice with regard to third-country jurisdictions of major derivatives markets and clearinghouses that have applied for recognition. ESMA's assessments represent a factual comparison of the third-country provisions with the ones of the EU. They also provide advice to the Commission with respect to the possible effects of regulatory discrepancies and what should be incorporated in the Commission decisions. Equivalence determinations may be unilateral acts, but at the same time they are endorsed within a scheme of collaboration between the EU and third-countries. Notably, it should be underlined that there is no specific procedure under which third countries can apply to the European Commission for assessments of equivalence. Third countries, in principle, can express an interest in being assessed, which the Commission would duly consider without any further commitment.³⁵

These standards ensure that recognized third-country clearinghouses do not disrupt the orderly functioning of European financial markets and do not earn a competitive advantage against European ones.³⁶ The rationale behind extending recognition to CCPs from foreign jurisdictions, only if their regulatory frameworks are trustworthy and of similar standards as domestic regulations, is to avoid potential market failures in their own jurisdictions. During the EMIR legislative development, contentious discussions about the form of the equivalence regime took place in Brussels with WTO commitments supposedly being taken into consideration.³⁷ To date, seven years after EMIR's introduction, 34 non-European clearinghouses from 15 third-countries, established in Australia, Hong-Kong, Japan, Singapore, South Africa, Canada, Mexico, New Zealand, Switzerland, South Korea, the US, the United Arab Emirates, India, Dubai, and Brazil have been recognized by ESMA.³⁸ Notably,

-

https://www.esma.europa.eu/sites/default/files/library/2015/11/signed mou for singapore ccps with mas 20150210.pdf. For ESMA's guidelines on cooperation arrangements and information exchange between competent authorities and between competent authorities and ESMA, see here: https://www.esma.europa.eu/sites/default/files/library/2015/11/2014-298 guidelines on cooperation arrangements and information exchange 0.pdf.

No right is extended to third countries for receiving an equivalence assessment. See European Commission, 'EU Equivalence Decisions in Financial Services Policy: An Assessment', Commission Staff Working Paper (2017), p. 8. 21.

See ESMA/2012/379, Draft Technical Standards for the Regulation on OTC Derivatives, CCPs and Trade Repositories, para. 126.

See Lucia Quaglia, 'The Politics of "Third Country Equivalence" in Post-Crisis Financial Services Regulation in the European Union', West European Politics, 38(1) (2015), 167–184.

For the list of the 32 recognized clearinghouses, see ESMA, List of third-country central counterparties recognised to offer services and activities in the Union, 26 July 2019, available here: www.esma.europa.eu/sites/default/files/library/third-country_ccps_ recognised_under_emir.pdf (lastly checked in September 2019).

and after some troublesome discussions, the US Dodd-Frank regime was deemed equivalent by the European Commission.³⁹

What does the number of recognized third-country regimes and clearinghouses tells us about the effectiveness of the EU equivalence regime? It implies that it is a fact-based detailed process that is very cumbersome as it lasts on average between two and four years. ⁴⁰ Similarly, as the 'substituted compliance' regime in the US, ⁴¹ it implies that it is a rather long process that lasts a number of years. However, when it attains its finalité, it can provide clarity and legal certainty to the clearinghouses doing business with Europe. But what about the third-countries, whose regimes are not qualified as equivalent? Are their clearinghouses afforded the same opportunities to determine their equivalence and provide their services in the EU?

The forthcoming analysis filters the conformity of the European financial regulation under the GATS. The EU regime permits clearing trade flows with 15 jurisdictions outside Europe. Neither the European Commission nor EMSA have unlimited resources to engage in highly complex analyses of all third-countries' clearinghouse regulations. Accordingly, CCPs from 'third-countries' that have not been deemed equivalent might find it more burdensome to furnish their services in Europe. For the sake of this argument, there are clearinghouses that have applied for recognition, while their domestic regime has not yet qualified as 'equivalent', and might need to wait for an undetermined number of years before they can provide their clearing services in Europe. 43

These regulatory frameworks on OTC derivatives seem to produce a new type of asymmetric compliance that can generate disruptions in the international derivatives clearing

For the Commission press release, see European Commission – Press release, European Commission adopts equivalence decision for CCPs in USA, 15 March 2016, available here: http://europa.eu/rapid/press-release_IP-16-807_en.htm, and for the Commission Implementing Decision, see here: http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016D0377&from=EN.

European Parliament, 'Briefing: Understanding Equivalence and the Single Passport in Financial Services: Third-Country Access to the Single Market', February 2017, page 3, www.europarl.europa.eu/RegData/etudes/BRIE/2017/599267/EPRS_BRI(2017)599267_EN.pdf.

The comparability determinations by the Commodity Futures Trading Commission ("CFTC") are even fewer than the 'equivalence' assessments. See www.cftc.gov/LawRegulation/DoddFrankAct/CDSCP/DoddFrankCDF5.html.

As evidenced in the discussion on "likeness" under Article II of the GATS, those clearinghouses would have to be demonstrate that they are "like suppliers".

⁴³ CCPs from Argentina, Malaysia, Chile, China, Turkey, Israel, Taiwan, and Thailand and recently the UK among others have applied for recognition. See ESMA's list for further details, www.esma.europa.eu/sites/default/files/library/list_of_applicants_tc-ccps.pdf.

business.⁴⁴ Equivalence regimes that safeguard clearinghouses conducting transnational business are on a level – high standard – playing field. This would imply that their costs are comparable. As such, clearinghouses from one or the other side would not need to incur inflated compliance costs in foreign jurisdictions or conversely reduced conditions of competition. Nevertheless, even as market certainty for cross-border OTC derivatives clearing is promoted, liquidity is injected and no market disruptions occur if a third-country CCP is recognized under EMIR. The opposite can be said when an 'equivalence' agreement is not struck. This is for the minor jurisdictions which do not have an equivalence deal with the EU. Next, we examine EMIR through the GATS 'looking glass' to evaluate the tension between financial regulation and international trade law.

4. TRADE IN FINANCIAL SERVICES UNDER THE GATS: THE RELEVANT SCOPE AND MODES OF SUPPLY ASPECTS FOR CLEARINGHOUSES

The liberalization of financial services in the multilateral trading system is effected through the GATS disciplines and Members' commitments. ⁴⁵ This contribution reveals to what extent the GATS legal order challenges the European framework for conducting equivalence assessments of non-European clearinghouses. In that endeavor, I inquire whether clearinghouses from some third-countries might find it more burdensome to access the European market than other non-European clearinghouses. The relevance of this exercise lies not only in examining the tension between financial regulation and WTO law, but also in finding a mutually beneficial space for third countries. The analysis builds on the concepts of non-discrimination and transparency, and the GATS relevant provisions are put in context. It shall be mentioned that the limited jurisprudence on the GATS, alongside with the vast flexibility that the Agreement offers for financial services, makes this exercise somewhat delicate.

4.1 THE GATS 'PLAYBOOK' – SCOPE OF APPLICATION

The GATS is the first multilateral and legally enforceable agreement that covers trade in services. The dynamics that led to its 'genesis' came as the consequence of political

See J. Philpott, 'Equivalence' www.theotcspace.com/2015/10/11/%E2%80%98equivalence%E2%80%99-%E2%80%93-keyglobal-otc-swap-reform.

Pursuant to GATS Article XX:3, schedules are an integral part of the GATS.

compromise and vast flexibility is provided to Members.⁴⁶ Progressive liberalization constitutes the Agreement's compass⁴⁷ Investigating how the European rules that affect international derivatives clearing may be scrutinized under this legal order contributes to understanding and challenging the balance between Members' regulatory autonomy and integration norms. Furthermore, the EU is a full member of the WTO. In terms of scope, the GATS is applicable to "*measures by Members affecting trade in services*".⁴⁸ The Panel in *EC–Bananas III* has stated that the GATS has a wide scope to 'ensure that the disciplines of the GATS would cover any measure bearing upon conditions of competition in supply of a service, regardless of whether the measure directly governs or indirectly affects the supply of the service'.⁴⁹ Additionally, the Panel in *EC – Bananas III* defined the scope of application of the GATS in the following terms:

[N]o measures are excluded a priori from the scope of the GATS as defined by its provisions. The scope of the GATS encompasses any measure of a Member to the extent it affects the supply of a service regardless of whether such measure directly governs the supply of a service or whether it regulates other matters but nevertheless affects trade in services.⁵⁰

Further the Panel in Argentina – Financial Services held that "as a preliminary matter ... the question of the applicability of the GATS to the measures at issue before evaluating their consistency with the substantive obligations invoked by Panama".⁵¹ It follows from this that the scope is an issue that needs to be examined by WTO judiciary before any discussion into substance is engaged.

In addition, a distinction between the measures 'as such' and 'as applied' exists.⁵² Therefore, it can be maintained that not only the content of EMIR is under the GATS scrutiny,

See Juan A. Marchetti and Petros C. Mavroidis, 'The Genesis of the GATS', European Journal of International Law, 22(3) (2011), 689–721; Cf. Rudolf Adlung, & Aaditya Mattoo, (2008). 2 The GATS. A handbook of international trade in services, 48.

Third recital of the GATS Preamble. See also Panel Report, United States – Measures Affecting the Cross-Border Supply of Gambling and Betting Services, WT/DS285 (*US–Gambling*), para. 6.313.

GATS Article I:1; Cf. Appellate Body Report, European Communities – Regime for the Importation, Sale and Distribution of Bananas, WT/DS27 (EC-Bananas III), para. 220; Panel Report, Mexico – Measures Affecting Telecommunications Services, WT/DS204 (Mexico-Telecoms), para. 7.41; Panel Report, European Union and its Member States – Certain Measures Relating to the Energy Sector, WT/DS476 (EU – Energy Package), paras. 7.408-7.410; Panel Report, Argentina – Measures Relating to Trade in Goods and Services, WT/DS453 (Argentina-Financial Services), paras. 7.80, 7.84.

Appellate Body Report, *EC–Bananas III*, para. 7.281; Appellate Body Report, Canada – Certain Measures Affecting the Automotive Industry, WT/DS139 (*Canada – Autos*), paras. 164-166.

Panel Report, EC – Bananas III, para. 7.285

⁵¹ Panel Report, Argentina – Financial Services, para. 7.80.

For relevant jurisprudence, see for example Appellate Body Report, *United States – Continued Zeroing*, WT/DS350/AB/R, paras. 181, 79 ("both specific determinations made by a Member's executive agencies and

but also its application by the European executive agencies (i.e. the European Commission and ESMA).⁵³ The definition of a 'measure' is very broad in the GATS, encompassing any type of action in any form taken by Members.⁵⁴ The scope of the GATS covers both the treatment extended to services and service suppliers of foreign Members.⁵⁵ In the same vein, a 'measure' by a Member 'affecting trade in services' includes measures regarding the purchase, payment, or use of a service, and the access to and use of, in connection with the supply of a service among others.⁵⁶

Moreover, the GATS Annex on Financial Services⁵⁷ (hereinafter referred to as Annex) provides further clarity on defining 'financial services'⁵⁸ and 'financial service supplier'.⁵⁹ Importantly, the Annex includes in its indicative list, the services linked to clearing OTC derivatives; namely, 'settlement and clearing services for financial assets, including securities, derivative products, and other negotiable instruments'.⁶⁰ The panel in *China – Electronic Payment Services* clarified the nature of this sector:

regulations issued by its executive branch can constitute acts attributable to that Member..."), 87, 259-260; Appellate Body Report, EC – Selected Customs Matters, (WT/DS315/AB/R) para 165; Appellate Body Report, Dominican Republic – Import and Sale of Cigarettes, (WT/DS302/AB/R) para 107 ("...we observe that the Appellate Body has consistently affirmed the right of WTO Members to challenge legislation laying down norms of rules "as such", as well as their right to bring claims against the application of such measures in specific instances. ...).

For analysis on the application of the GATS in "as such" and "as applied measures" see; Sharif Bhuiyan,
'Mandatory and Discretionary Legislation: The Continued Relevance of the Distinction under the WTO',
Journal of International Economic Law, 5(3) (1 August 2002), 571–604; See also for an overview, Tania
Voon, & Alan Yanovich, (2005). What is the Measure at Issue?. Challenges and Prospects for the WTO,
Andrew Mitchell, ed., Cameron May Ltd.), pages 115-163, especially at pp. 126-127 and 135-136; For the
potential application of the GATS in the decisions of competition authorities, see Bart De Meester, (2008).
Testing European Prudential Conditions for Banking Mergers in the Light of Most Favoured Nation in the
GATS. Journal of International Economic Law, 11(3), 609-647; Claus-Dieter Ehlermann, & Lothar Ehring,
(2002). WTO Dispute Settlement and Competition Law: Views from the Perspective of the Appellate Body's
Experience. Fordham Int'l LJ, 26, 1505.

GATS Article XXVIII(a) provides for the definition of a 'measure' that includes laws, regulations, rules, and decisions among others.

⁵⁵ Appellate Body Report, *EC–Bananas III*, para. 227; See also Panel Report, *Argentina – Financial Services*, paras. 7.97-7.98.

GATS Article XXVIII(c). It shall be borne in mind that the list is indicative according to the Appellate Body Report, *EC–Bananas III*, para. 220.

⁵⁷ Pursuant to GATS Article XXIX, Annexes are binding for WTO Members.

GATS Annex on Financial Services, para. 5(a) reads as follows: *A financial service is any service of a financial nature offered by a financial service supplier of a Member. Financial services include all insurance and insurance-related services, and all banking and other financial services (excluding insurance).*

Ibid. para. 5(b) stipulates the following definition: A financial service supplier means any natural or juridical person of a Member wishing to supply or supplying financial services but the term "financial service supplier" does not include a public entity.

⁶⁰ Ibid. para. 5(a)(xiv).

[S]ubsector (xiv) encompasses the clearing and settlement of financial instruments sharing essentially the same characteristics as securities, derivative products, and other negotiable instruments. More particularly, (xiv) covers the clearing and settlement of financial instruments which have investment attributes, grant ownership rights and yield financial returns.⁶¹

The GATS provides four modes of supply for the provision of services.⁶² The most relevant for the purposes of this study are 'cross-border supply' (Mode 1) and 'consumption abroad' (Mode 2). This is because clearinghouses most commonly provide their services transnationally, without establishing commercial presence in third-countries. Possible inconsistencies between these two modes of supply for financial services are addressed below. It can thus be confidently inferred that the European equivalence regime and its application, touching on the conditions for the provision of cross-border clearing of OTC derivatives from non-European service providers, qualify as 'measures' that affect foreign clearinghouses.

As to the supply of services through mode 1, the Panel in US – Gambling noted the following:

"To sum up, we conclude that mode 1 includes all means of delivery. We are of the view that when a Member inscribes the word 'None' in the market access column of its schedule for mode 1, it commits itself not to maintain measures which prohibit the use of one, several or all means of delivery under mode 1 in a committed sector or subsector. This is especially so in sectors and sub-sectors where cross-border supply is effected essentially if not exclusively through the Internet."

. . .

"Therefore, a market access commitment for mode 1 implies the right for other Members' suppliers to supply a service through all means of delivery, whether by mail, telephone, Internet etc., unless otherwise specified in a Member's Schedule. We note that this is in line with the principle of 'technological neutrality', which seems to be largely shared among WTO Members."

Panel Report, China – Measures Affecting Electronic Payment Services, WT/DS413/R (*China–Electronic Payment Services*), para. 7.163.

Enshrined in GATS Article I:2, which reads as follows: For the purposes of this Agreement, trade in services is defined as the supply of a service: (a) from the territory of one Member into the territory of any other Member; (b) in the territory of one Member to the service consumer of any other Member; (c) by a service supplier of one Member, through commercial presence in the territory of any other Member; (d) by a service supplier of one Member, through presence of natural persons of a Member in the territory of any other Member. For literature on the GATS modes of supply, see Philip Chang, Guy Karsenty, Aaditya Mattoo, & Jiirgen Richtering, (1999). GATS, the Modes of Supply and Statistics on Trade in Services. *Journal of World Trade*, 33(3), 93-115; Guy Karsenty, (2000). Assessing trade in services by mode of supply. *GATS 2000: New Directions in Services Trade Liberalization*, 33-56.

⁶³ Panel Report, US – Gambling, para. 6.287

Panel Report, US – Gambling, para. 6.285.

The WTO adjudicatory bodies in the context of electronic services have not yet interpreted mode 2. Since the application of EMIR affects trade in financial services, it falls within the regulatory perimeter of the GATS. Next, I discuss the legal problem of distinguishing between Modes 1 and 2 in financial services trade. Following this, I consider how the GATS disciplines that promote transparency and prohibit discriminatory behaviours may assess the European equivalence rules. The analysis brings into the spotlight the tension between financial regulation and WTO law.

4.2 THE SUPPLY OF FINANCIAL SERVICES THROUGH THE GATS MODES 1 AND 2: NOT KEEPING UP WITH EVOLUTION

At the outset, the GATS modes of supply for wholesale financial services must be put in context. Importantly, we advocate that both Modes 1 and 2 can be admissible for the clearing of OTC derivatives based on the state-of-play of the General Agreement on Trade in Services and WTO jurisprudence. The analysis underscores that Modes 1 and 2 produce different legal effects depending on the context in which they arise. If different commitments are undertaken for Modes 1 and 2 in Members' schedules of commitments, then the level of liberalization varies accordingly. However, in the domain of financial services there is an inherent challenge in distinguishing Mode 1 from Mode 2.65 This can produce difficulties in the interpretation of scheduled commitments and in doing so give rise to legal uncertainty. Generally, for Mode 1 the supplier is not present in the territory where the service is provided, and telecommunications or international transport are textbook cases. In contrast, it is the 'movement of the consumer' that seems to be the benchmark for Mode 2,66 although as shown later that is not necessarily the case. Notably, the Panel in *Argentina–Financial Services* held that under the first two modes of supply, service providers 'may be located outside the territory

-

For general discourse on Modes 1 and 2 in the advent of new technologies see Usman Ahmed, Brian Bieron, & Gary Horlick (2015). Mode 1, Mode 2, or Mode 10: How Should Internet Services Be Classified in the Global Agreement on Trade in Service. Boston University International Law Journal.; Aadita Mattoo & Ludger Schuknecht (1999). Trade policies for electronic commerce. The World Bank; Judson O. Berkey, (2001) 'A Framework Agreement for Electronic Commerce Regulation under the GATS', Institute for International Finance, 1–2; Emad Tinawi & Judson O. Berkey (1999). E-services and the WTO: the adequacy of the GATS classification, OECD, available here: www.oecd.org/dsti/sti/it/ec/act/paris_ec/pdf/gatsfin.pdf [24 May 2001].

WTO, 'Trade in Services', S/L/92, 28 March 2001, 'Guidelines for the Scheduling of Specific Commitments Under the General Agreement on Trade in Services', pp. 8–10.

of the Member 'importing' the service'.⁶⁷ Below, we explain the intricacies in the supply of financial services and the legal interpretation challenges associated with it.

Fleshing out the GATS modes of supply conundrum requires an understanding of the mechanics of financial transactions. This is a complex exercise due to the breadth of activities financial services involve and the interconnectedness of financial markets. Some financial services operate on technical networks and as a result, their supply is hard to capture from an international trade law perspective. Unsurprisingly, to understand how the reality of financial services translates into the clearing of derivatives under WTO law presupposes complex considerations, assuming there are diverging scheduled commitments for Modes 1 and 2. Unlike what occurred in *US*–*Gambling*, ⁶⁸ this issue turns from a purely academic endeavour to a tangible one for the WTO system. This is because legal ambiguities are likely to emerge. Further we introduce an international clearing hypothetical to add concreteness to the subject.

A credit-default-swap ("CDS") is consummated between two parties, A and B. Once the terms of the contract are agreed between the counterparties, the swap passes to the post-trade phase. There, the swap between A and B must be centrally cleared, to mitigate the counterparty risk exposures of the transaction. Since clearing services are required, another party steps in, namely the clearinghouse CCP. As explained, the CCP at this stage inserts itself between parties A and B. It is held that the clearing service supplied is none other than the service provided by the CCP to the parties that conclude the swap, namely A and B. For the sake of simplicity in this example, the two parties are from the same WTO Member and the parties' relation to the clearinghouse is not examined. Since the service supplier (CCP), the service consumers (A & B), and the service at stake (clearing of the CDS) are defined, the next step is to supplement the scenario with the international dimension features, so that the GATS

-

Panel Report, Argentina – Measures Relating to Trade in Goods and Services, WT/DS453 (*Argentina–Financial Services*), para. 7.210.

The US commitments for the provision of gambling services under Modes 1 and 2 are identical; Cf. Panel Report, *US*— *Gambling*, para. 3.29; Sacha Wunsch-Vincent 5 (2006), 'The Internet, Cross-Border Trade in Services, and the GATS: Lessons from US— Gambling, World Trade Review, 5, 326; For general literature providing comments on the case, see Panagiotis Delimatsis, (2006). Don't Gamble with GATS—The Interaction between Articles VI, XVI, XVII and XVIII GATS in the Light of the US—Gambling Case. *Journal of world trade*, 40(6), 1059-1080; Federico Ortino, (2006). Treaty interpretation and the WTO appellate body report in US—Gambling: a critique. *Journal of International Economic Law*, 9(1), 117-148.

On several occasions the parties to derivatives contracts are not members of clearinghouses. Thus, these parties need to acquire the services of other institutions, which are members, to ensure access to the clearinghouse's services. This scenario perplexes our theory and it is intentionally disregarded. See D. Turing, Clearing and Settlement (London: Bloomsbury, 2016), pp. 44–49.

modes of supply discussion becomes relevant. The level of liberalization, enshrined in the parties' commitments, is added next.

A and B, are investment banks incorporated in Europe. They decide to clear their CDS with clearinghouse CCP established in the US. Generally, OTC derivative traders are large financial institutions that supply their services across frontiers. Clearinghouses are also international institutions selected for their efficiencies. That said, when it comes to Mode 1 – cross-border supply – things appear to be quite clear-cut. The clearing service in question is provided from the territory where the service supplier (the CCP) is situated into the territory where the contracting parties reside, accordingly from the US to the EU in our example. Traditionally, it is maintained that cross-border supply is the only GATS mode that does not require territorial proximity between the service supplier and the consumer, but this assumption is doubtful due to the emergence of new technologies and infrastructure. Attention is drawn to the challenging state-of-play for Mode 2.

The role of international capital flows, global financial communication channels, and financial market infrastructure facilitates the transnational distribution of financial services. This narrows the gap – or even cuts the dividing line – between Modes 1 and 2 because the natural presence of consumers is not borne in mind. More accurately, "once the physical presence of the consumer ceases to be a benchmark for determining the place of delivery of a service, it becomes extremely difficult to determine in an unambiguous manner where a service is delivered". As a reminder, consumption abroad is the mode of supply that depends on the consumer's location. Notably, wholesale financial transactions, such as the derivatives clearing, are provided transnationally through financial infrastructure networks. Given that financial regulation has provided the green light, meaning that CCPs from third-countries are qualified under equivalence/substituted compliance regimes, this results in making the determination of a physical location for the supply of the service a 'Gordian knot'. Thus, the issue becomes highly complex.

Conceptualizing Mode 2 in our hypothetical has a similar outcome as Mode 1 – the provision of clearing services from the US clearinghouse to the European banks, with the difference that the legal narrative of the transaction changes. It can be convincingly argued

Tinawi and Berkey, supra note 44, at 3.

⁷

WTO, Council for Trade in Services, Committee on Trade in Financial Services, S/C/W/312, S/FIN/W/73, 3 February 2010, p. 13. This Chapter underlines the problem of distinguishing between Modes 1 and 2 and provides the background discussions at the WTO level.

that clearing services are supplied by Mode 2 provided: (i) there is no solicitation on the part of the CCP to parties A and B and they initiate the transaction; and, (ii) A and B conclude the deal through their US offices which are governed by foreign law and are not constituted as separate legal entities under US laws. If these conditions are fulfilled, clearing services can be provided through Mode 2. This transaction can qualify as consumption abroad because the European banks would clear an EU-bound CDS with a US CCP through their New York offices. The elements of this transaction that are of the essence for Mode 2 are (i) that the EU banks opt for a third-country CCP, one from the US in our case, and (ii) that they complete the transaction via their NY offices, which are not subject to US laws. This is not a domestic transaction for the reason that the European banks opt for sourcing European business into the US.

However, the fact that both Modes 1 and 2 are plausible for the purposes of derivatives clearing begs the question of where does the transaction actually occur: in financial communication channels? For these transactions, it is extremely difficult to unambiguously determine the GATS mode of supply. The foregoing analysis highlights that clearing derivatives services can be supplied by both Modes 1 and 2. Nevertheless, it is obvious that there is not a clear line to define the difference between the two modes. To avoid legal ambiguities in the future, it will be necessary to have a conclusive benchmark to make such determinations.

Distinguishing the modes of supply and understanding the legal reality behind the provision of financial services has important legal consequences. In the case of cross-border supply, if a Member has not entered commitments for clearing services, its regulatory behaviour cannot be scrutinized by the GATS provisions. Conversely, if for Mode 2 full commitment is extended, the GATS scrutiny is significantly broader. As a result, it is evident that the modes in question can generate different legal effects depending on the interest of WTO Members. As the financial industry evolves, international trade law needs to keep up the efficacy of its legal instruments in order to avoid loopholes in its architecture. Since neither the WTO dispute settlement system nor its Members have clarified that score until now, this discourse has no definite answer and we argue that both the venues of Mode 1 and 2 can be used for clearing services.

_

GATS Article XXVIII(m)(i) lays out that 'juridical persons of another Member' shall be constituted or organized according to the law of that other Member.

The commitments for clearing derivatives in the EU Schedule⁷³ are essential for the legal standards of Article VI of the GATS, analysed right below. These commitments underscore the existence of legal ambiguities that arise if different commitments are undertaken for Modes 1 and 2. Pursuant to the EU Schedule in place for financial services sectors: The Communities and their Member States undertake commitments on Financial Services in accordance with the provisions of the 'Understanding on Commitments in Financial Services'(referred to as Understanding).⁷⁴ The Understanding bestows in fact 'a sort of a formula approach to scheduling commitments under Articles XVI, XVII, and XVIII of the GATS with regard to financial services'.⁷⁵ When it comes to international trade, the Understanding's reach extends to both Modes 1 and 2 of the GATS.⁷⁶ However, for clearing services the Understanding offers commitments only for services under Mode 2.

Consequently, in the case of Mode 1, the EU has not assumed commitments for clearing derivatives, and as a result its regulatory behaviour cannot be filtered by the GATS provisions that require specific commitments. Conversely, for Mode 2 the GATS scrutiny is significantly wider because full commitment is extended, and accordingly the European financial regulation complies with higher WTO standards. Given the existing difficulty in distinguishing Mode 1 from Mode 2 in financial services, this thesis endorses the view that clearing OTC derivatives

_

For the EU Schedule, see www.wto.org/english/tratop_e/serv_e/serv_commitments_e.htm. However, it should be mentioned that the EU consists of 28 Members, for the time being, and not all Members' commitments are reflected in the EU schedule, notified to the WTO. Some EU Members schedules are still in force independently. For the sake of completeness, it shall be mentioned that Estonia and Latvia have undertaken Mode 1 commitments for clearing services in their schedules GATS/SC/127 and GATS/SC/126, respectively. The analysis, however, does not delve into particular market access and national treatment commitments on clearing services undertaken by EU Members, but rather captures the greater picture in light of the adoption of the Understanding.

The Understanding is not of binding nature and therefore it is up to WTO Members to undertake their financial services commitments in accordance with the principles promulgated by it. The Members that have voluntarily adhered to it are the following: Australia, Bulgaria, Canada, Czech Republic, European Communities (EC15), Hungary, Iceland, Japan, Lichtenstein, New Zealand, Nigeria, Norway, Slovak Republic, Sri Lanka (excluding insurance), Switzerland, Turkey, and the United States.

See WTO, supra note 50, p. 10.

In respect of Mode 1, the Understanding mandates that a Member shall allow non-resident suppliers of financial services to provide, 'as a principal, through an intermediary or as an intermediary, and under terms and conditions that accord national treatment', a specific number of services: (a) insurance of risks relating to maritime shipping and commercial aviation and space launching and freight, (b) reinsurance and retrocession and the services auxiliary to insurance, (c) provision and transfer of financial information and financial data processing as referred to in subparagraph 5(a)(xv) of the Annex and advisory and other auxiliary services, excluding intermediation, relating to banking and other financial services as referred to in subparagraph 5(a)(xvi) of the Annex. When it comes to what appears to be Mode 2, the commitments have quite a broader scope; Members 'shall permit its residents to purchase in the territory of any other Member the financial services indicated' in the previous paragraph, and additionally all banking and other financial services listed in subparagraphs 5(a)(v) to (xvi) of the Annex. Consequently, the obligations emanating from the coverage of Mode 1 are narrower than of Mode 2.

services between the EU and WTO Members are supplied through mode 2. The subsequent analysis of the GATS Article VI evolves on that premise. This approach is adopted because it is consonant with the GATS text and the existing WTO jurisprudence while it reflects how wholesale financial services are provided. At the same time, it serves the liberalization agenda to opening up markets.⁷⁷ Since the EU has undertaken commitments for Mode 2 clearing derivatives, the article proceeds by testing the GATS Article VI consistency of EMIR rules.

5. ASSESSING THE WTO LAW CONSISTENCY OF THE EUROPEAN UNION CCP REGIME

5.1 ANALYSIS UNDER THE GATS ARTICLE VI ON DOMESTIC REGULATION

Domestic Regulation is a GATS hybrid provision because certain of its elements are intimately linked to the Members' Schedules. Article VI introduces a mechanism that requires that Members' regulations are not inequitable, excessively interventionist, or inhibit trade disproportionately to the desired outcomes.⁷⁸ Generally, liberalization in services is confined by non-tariff barriers that take the form of regulations.⁷⁹ This is especially the case for financial services, which is one of the most heavily regulated industries. Nevertheless, the Members' regulatory autonomy is prescribed in the fourth recital of the GATS,⁸⁰ and can serve as a valuable means of interpretation. It is assumed that governmental protectionism⁸¹can be entrenched in Members' regulations and subsequently can be deemed, on a case-by-case basis, unlawful under WTO law.

Article VI scrutinizes how domestic regulations are designed, administered, and applied when specific commitments are undertaken. It stipulates legally binding provisions of procedural nature, 82 a mandate to deploy a multilateral discipline for licensing requirements, and a substantive obligation of transitional nature. The application of Members' domestic

--

United Nations Conference on Trade & Development, 'A Positive Agenda for Developing Countries: Issues for Future Trade Negotiations' (2000). 463.

For the negotiations on Domestic Regulation, see Panagiotis Delimatsis, (2010) 'Concluding the WTO Services Negotiations on Domestic Regulation – Hopes and Fears', *World Trade Review*, 9(4), 643–673.

For a categorization of barriers to trade in services, see Bernard Hoekman and Carlos A. Primo Braga (1997), 'Protection and Trade in Services: A Survey', Open Economies Review, 8(3), 285–308; Robert M. Stern (2002), 'Quantifying Barriers to Trade in Services', *Development, Trade, and the WTO: A Handbook. Washington, DC: The World Bank.*

The forth recital of the GATS Preamble reads as follows: Recognizing the right of Members to regulate, and to introduce new regulations, on the supply of services within their territories in order to meet national policy objectives and, given asymmetries existing with respect to the degree of development of services regulations in different countries, the particular need of developing countries to exercise this right.

See Jagdish Bhagwati, (1964). 'The Pure Theory of International Trade: A Survey', The Economic Journal, 74(293), 18.

Panel Report, US-Gambling, para. 6.432.

regulatory measures shall reflect on the principles embedded in the GATS, most importantly, on fairness, as an expression of non-discrimination, openness, in the form of transparency, and on negotiated commitments. The panel delineated the scope of Article VI in *US–Gambling*, and stated that WTO Members' regulatory sovereignty ceases when the GATS rights of other Members are infringed. The analysis proceeds by testing the compatibility of the EMIR equivalence regime under Article VI:1 and VI:5.

5.1.1 EMIR'S EQUIVALENCE FRAMEWORK EVALUATED UNDER THE GATS ARTICLE VI:1

At the outset, Article VI:1 of the GATS reads as follows: In sectors where specific commitments are undertaken, each Member shall ensure that all measures of general application affecting trade in services are administered in a reasonable, objective and impartial manner.

When it comes to how the Commission conducts EMIR equivalence assessments of third country clearinghouse regimes, it is underlined that WTO rules cover both how the measure is administered and the measure itself. The Commission's role is to examine the regulatory frameworks of third-countries, using ESMA's technical advice, and to determine the regime's equivalence with EMIR. Importantly, it is a stepping stone in the recognition process and highly impacts on the market access of third-country CCPs. Given that third-countries are largely WTO Members, it is vital to evaluate the measure's GATS-conformity for possible breaches.

At the outset, it is examined whether EMIR Article 25 constitutes a measure of 'general application' in the context of Article VI:1. It is important to understand that Article 25 puts forward the rules that the European Commission follows while discharging its equivalence assessment tasks. Carrying out equivalence assessments qualifies as a measure of general application firstly because it affects an unidentified number of economic operators;⁸⁵ namely, all CCPs established in third-countries on the one hand and all market participants within the EU receiving clearing services on the other. Secondly, within Article 25 a wide range of measures is included and the rules of conduct alongside the exercise of influence of certain

See Panagiotis Delimatsis. (2007), International Trade in Services and Domestic Regulations: Necessity, Transparency, and Regulatory Diversity (Oxford University Press), p. 95.

Panel Report, *US–Gambling*, para. 6.316. The Appellate Body reaffirmed the panel's finding; Appellate Body Report, *US–Gambling*, para. 235.

See Panel Report, United States – Restrictions on Imports of Cotton and Man-Made Fibre Underwear, WT/DS24, para. 7.65.

authoritative bodies, such as the Commission, are scrutinized by this provision.⁸⁶ Consequently, the Commission's administrative conduct and decision-making function under the EMIR provision at issue can be characterized as of general application for the purposes of GATS Article VI:1.

The application of the equivalence assessments by the European Commission can be challenged as biased against the regulatory frameworks of smaller countries that are not financial hubs because: (i) even if Members have CCP regulatory frameworks of similar quality, some Members have received equivalence decisions while others have not, and (ii) there are no guidelines or rules on the sequence the European Commission carries out its equivalence assessments. Overall, the Commission seems to favour CCPs from jurisdictions that have stronger 'regulatory leverage' because it is more sensible from an economic standpoint to acquire the clearing services from WTO Members with stronger financial institutions rather than the opposite. The WTO dispute settlement mechanism is at the disposal of smaller countries that can initiate litigation. The argument that the European Commission's administration of equivalence assessments is discretionary is of procedural nature and the role of the Commission is examined to reveal whether the current state of affairs can be problematic from a WTO law perspective.

The Commission can be accused of not safeguarding the standards of due process for WTO Members. Notably, it has been characterized as inherently political.⁸⁷ This claim is substantiated by the fact that some financial rulebooks are selected to be assessed and are deemed equivalent by the European Commission, while the regulatory frameworks of other Members are not. As a result, some Members' clearinghouses cannot be recognized by ESMA to supply services to European financial institutions abroad in countries other than to those with equivalence decisions, issued by the Commission. What is political in this process is the sequencing of the equivalence assessments. In the absence of guidelines setting out the order to be followed for carrying out equivalence assessments, some Members are given priority to the detriment of others. For instance, the regimes of Singapore, Australia, Japan, and Hong Kong, countries that represent international financial centres, acquired their equivalence decisions by the European Commission in 2014. Conversely, Members, such as Argentina,

_

See Panel Report, European Communities and its Member States – Tariff Treatment of Certain Information Technology Products, WT/DS375, paras. 7.1026–7.1027.

In particular, J. Hill, the former Commissioner for Financial Stability, Financial Services and Capital Markets Union, said: 'Competitive pressures and political reality influence how people think about the equivalence process', supra note 26, p. 3.

Russia, and Thailand are still on the waiting list. To that end, the two specific procedural aspects – mentioned above – of the general mandate for the administration of equivalence assessments by the European Commission, enshrined in EMIR Article 25, need to be examined closer.

The first Paragraph of Article VI, similarly to Article X:3(a) of the GATT 1994,⁸⁸ stipulates the obligation of reasonable, objective, and impartial administration. This obligation hinges on Members' assumed commitments in service sectors and mirrors the GATS asymmetric architecture. The asymmetric architecture of the GATS provides that as it is a sovereign right of WTO Members to enter commitments it is natural for specific services sectors the level of liberalization of national treatment and market access commitments would vary among WTO Members on the basis of their respective undertaken commitments.⁸⁹ Interestingly, Article VI:1 presupposes that Members, when administering their domestic legal frameworks, shall conform to certain minimum standards of due process,⁹⁰ which include the notions of fairness and equity.⁹¹ This provision reinforces the norms of consistency and predictability⁹² and promotes good regulation standards for Members. The scarcity of GATS case law on this provision makes its GATT counterpart a valuable guide to investigate the WTO adjudicatory bodies' stance.

Any measure that on the surface appears fair and just could come under the purview of this provision if it is *de facto* applied in an arbitrary, unreasonable, and biased fashion, as the Appellate Body noted in *US–Shrimp*. 93 This element of WTO judicial review is essential to

Article X:3(a) of the GATT 1994 reads as follows: Each contracting party shall administer in a uniform, impartial and reasonable manner all its laws, regulations, decisions and rulings of the kind described in paragraph 1 of this Article ("of general application"). The line of reasoning developed by the WTO judiciary can prove a salient guide for understanding the mechanics of the GATS Article VI:1. See Panagiotis Delimatsis, (2007). 'Due Process and "Good" Regulation Embedded in the GATS – Disciplining Regulatory

Behaviour in Services Through Article VI of the GATS', Journal of International Economic Law, 10, 20–28.

For example, for "clearing and settlement" services *Country x* might have entered market access and national treatment full commitment for modes of supply 1-3, which implies a high level of liberalization, while Country y might have undertaken no market access commitment for modes 1-3 and national treatment commitment for only mode 3, which would imply a significant lower level of liberalization. Thus, the term asymmetric geometry/architecture of the GATS is used to express the leeway WTO Members enjoy in entering their commitments for services sectors.

See Panel Report, European Communities – Selected Customs Matters, WT/DS315 (EC–Selected Customs Matters), para. 7.134.

Geza Feketekuty, (2000) 'Regulatory Reform and Trade Liberalization in Services', in P. Sauvé and R. M. Stern (eds.), Services 2000: New Directions in Services Trade Liberalization, 229–230. Cf. Panel Report, EC–Selected Customs Matters, paras. 7.127, 7.490.

⁹² Ibid, paras. 7.108, 7.431.

Appellate Body Report, United States – Import Prohibition of Certain Shrimp and Shrimp Products, WT/DS58, para. 160.

avoid governmental circumvention based on the distinction between measures as applied / as such. Additionally, an infringement on the obligations mandated in Article VI:1 of the GATS can occur as the result of an omission in a case where an obligation to act in a specific manner is imposed. Differential treatment over time and relating to other trade operators is disallowed as well. The WTO jurisprudence reveals that the obligation laid down in VI:1 circumscribes the administration of such measures or how these measures are applied in practice, and does not scrutinize their substantial elements. The administration of measures should have a significant impact on the holistic application of a Member's regulation, and not only on the course of a particular case.

EMIR has been in place since 2012. In that period, the European Commission has decided that 15 third-country CCP regimes are equivalent to the EU.⁹⁹ Accordingly, only clearinghouses from these 15 jurisdictions can provide, once they are recognized by ESMA, their services to European markets. It should be stressed that the way equivalence assessments are carried-out takes time. However, less trade-restrictive alternatives that do not jeopardize stability might be available, and are discussed *infra*. Moreover, due to financial integrity considerations and the intricacies of financial regulation, the process becomes additionally complex and cumbersome.¹⁰⁰ Nonetheless, the outcome limits the access of European market participants to third-country clearinghouses abroad from the abovementioned jurisdictions.

The way the Commission conducts its equivalence assessments raises questions of impartiality and objectivity. First, the European Commission seems to indulge in 'cherry-picking' of the jurisdictions that admittedly have bigger clearinghouses, such as the US, Hong Kong, Australia, and Singapore. This practice seems sensible from an economic perspective.

Panel Report, Dominican Republic – Measures Affecting the Importation and Internal Sale of Cigarettes, WT/DS302, para. 7.379.

Panel Report, EC–Selected Customs Matters, para. 7.123.

⁹⁶ Appellate Body Report, EC–Bananas III, para. 200.

Panel Report, *US–Gambling*, para. 6.432; Cf. for the GATT perspective, Panel Report, Argentina – Measures Affecting the Export of Bovine Hides and the Import of Finished Leather, WT/DS155, paras. 11.70–11.71; Appellate Body Report, EC– Selected Customs Matters, paras. 200–201.

See Panel Report, United States – Anti-Dumping Measures on Certain Hot-Rolled Steel Products from Japan, WT/DS184, para. 7.268.

⁹⁹ For the European Commission document listing the EMIR Equivalence decisions, see here: https://ec.europa.eu/info/files/emir-equivalence-decisions en (lastly checked on 28 September 2019).

ESMA's technical advice are objective-based analyses which examine the non-European countries' regimes on a line-by-line basis, resulting in a thorough but cumbersome process, that can be verified by the fact that the Dodd-Frank framework got the green light from the Commission only in 2016. See, for example, the ESMA technical advice issued for the US: www.esma.europa.eu/sites/default/files/library/2015/11/2013-1157_technical advice on third_country_regulatory_equivalence_under_emir_us.pdf.

Nevertheless, that is not the case from an international trade angle, provided that the GATS obligations and commitments are borne in mind. That is because the Commission's procedure for the assessment of equivalence appears to favour certain third countries at the expense of others, simply by not evaluating their regimes (and as a result not allowing their CCPs to offer their services to the EU market). More interestingly, although the central-clearing frameworks of Argentina, Indonesia, Russia and India are on the same regulatory implementation rating by the Financial Stability Board ("FSB"), only India has acquired an equivalence decision by the European Commission. 101 Of course the European Commission is by no means obliged to make its decisions on the basis of the ratings published by the FSB. Yet such ratings might be a good guide for financial authorities to use in the order they carry out their equivalence evaluations in order to avoid criticism of due process by third countries. Nevertheless, an empirical study that exceeds the scope of this Chapter would be required to identify the patterns and consistently appraise the methodology the Commission uses to assess third-countries' financial rulebooks. Second, priority is given to the countries that have 'regulatory leverage' in the sense that countries with stronger financial centers are assumed to craft better regulations. Thus, it seems easier for Europe to proceed with the examination of their regimes.

Importantly, since there are no guidelines on what sequence the Commission shall follow to examine foreign jurisdictions, another question of compatibility with Article VI:1 of the GATS emerges. The absence of guidelines or standards in how the Commission decides to initiate its equivalence assessments begs the question of whether the administration of EMIR Article 25 is objective, 102 especially as CCPs from smaller Members apply, but are unable to supply their services to European financial institutions abroad due to the Commission's lack of Implementing Act. Notably, irrespective of the CCPs application for recognition date at ESMA, there is no procedural rule that sets a condition to the Commission relating to the order of third country equivalent assessments. Consequently, what might be in violation of GATS Article VI:1 is that the Commission prioritizes in its equivalence assessments some Members

_

The FSB frequently conducts assessments of the regulatory frameworks of G20 on central-counterparties, trade reporting, market transparency, and exchange and electronic platform trading. For the latest report on central-clearing and the regulatory implementation ratings, see FSB, 'OTC Derivatives Market Reforms: Thirteenth Progress Report on Implementation' (19 November 2018), available here: https://www.fsb.org/wp-content/uploads/P191118-5.pdf (lastly accessed on 12 August 2019).

From GATT 1994 jurisprudence, the panel in *China–Raw Materials* noted that the lack of definition, guidelines, or standards in how the export quotas were allocated by local departments constituted non-uniform administration inconsistent with Article X:3(a). Panel Report, *China – Measures Related to the Exportation of Various Raw Materials*, WT/DS394, paras. 7.751–7.752.

over others by discretionary deciding to evaluate some regimes, without providing the same opportunity to clearinghouses from other jurisdictions.

Arguably, the Commission and ESMA lack the unlimited resources to conduct simultaneously assessment of all WTO Members financial rulebooks. Considering the complexities of such determinations and the number of third-country jurisdictions it can be understandable. However, the Commission's discretionary behaviour in the administration of EMIR could be found in violation of the GATS Article VI:1. To remedy the current state-of-play would require either: (a) provision to all Members an equal opportunity to have their regulations evaluated for equivalence, something extremely difficult in practice; or, (b) further harmonization of regulatory standards among Members, or at least parts thereof, to permit trade-flows. On a normative note, it can be argued that to encourage trade in financial services without facing the transaction costs and market access barriers raised by regulations, such as the regimes of equivalence or substituted compliance, it is essential for the WTO to provide a venue for its Members to discuss and if possible mitigate their regulatory divergences.

5.1.2 ASSESSING TRANSPARENCY ELEMENTS UNDER THE EMIR EQUIVALENCE SYSTEM THROUGH THE GATS ARTICLE VI:5

Transparency is one of the WTO fundamental disciplines that reflects the Members' openness towards their counterparts. It is also one of the general obligations applicable to trade in services. Transparency, as it is enshrined in GATS Article III, relates to the Members' mandate to furnish predictability in the multilateral trading system.¹⁰⁴ Lex specialis resides in

1. Each Member shall publish promptly and, except in emergency situations, at the latest by the time of their entry into force, all relevant measures of general application which pertain to or affect the operation of this Agreement. International agreements pertaining to or affecting trade in services to which a Member is a signatory shall also be published.

The watering-down of the excessive regulatory scrutiny in equivalence determinations and the focus solely on the regulatory provisions that matter can facilitate the international integration of clearing services. This approach is consonant with efficiency considerations of increasing liquidity and reducing transaction costs in the derivatives clearing business. The International Swaps and Derivatives Association ("ISDA") put forward five principles according to which equivalence / substituted compliance frameworks should operate in order to avoid the current troublesome state-of-play, see ISDA, 'White Paper: Cross-Border Harmonization of Derivatives Regulatory Regimes' (September 2017).

Article III of the GATS, entitled "Transparency" reads as follows:

^{2.} Where publication as referred to in paragraph 1 is not practicable, such information shall be made otherwise publicly available.

^{3.} Each Member shall promptly and at least annually inform the Council for Trade in Services of the introduction of any new, or any changes to existing, laws, regulations or administrative guidelines which significantly affect trade in services covered by its specific commitments under this Agreement.

^{4.} Each Member shall respond promptly to all requests by any other Member for specific information on any of its measures of general application or international agreements within the meaning of paragraph

GATS Article VI Par. 5(a) (i) which encounters the concept of transparency in the domain of qualification procedures, technical standards, and licensing requirements. GATS Article VI:5 encompasses a substantive legal obligation of transitional character; this obligation is 'pending the entry into force of the disciplines developed in these sectors pursuant to paragraph 4', interestingly for 24 years. This provision accommodates a minimum qualitative set of standards of market access, only for the legal orders of Members that have entered commitments.

Article VI:5 of the GATS reads:

- (a) In sectors in which a Member has undertaken specific commitments, pending the entry into force of disciplines developed in these sectors pursuant to paragraph 4, the Member shall not apply licensing and qualification requirements and technical standards that nullify or impair such specific commitments in a manner which:
 - (i) does not comply with the criteria outlined in subparagraphs 4(a), (b) or (c); and
 - (ii) could not reasonably have been expected of that Member at the time the specific commitments in those sectors were made.
- (b) In determining whether a Member is in conformity with the obligation under paragraph 5(a), account shall be taken of international standards of relevant international organizations3 applied by that Member.

The criteria set by GATS Article VI:5 are: (i) a Member has a commitment in a specific services sector; (ii) this Member imposes licensing, or qualification requirements, or technical standards in this sector; (iii) the application of the measures nullifies or impairs the specific commitments assumed; (iv) the nullification or impairment transpires in a way that is not consonant with the conditions of transparency, objectivity, and necessity stipulated in Article

^{1.} Each Member shall also establish one or more enquiry points to provide specific information to other Members, upon request, on all such matters as well as those subject to the notification requirement in paragraph 3. Such enquiry points shall be established within two years from the date of entry into force of the Agreement Establishing the WTO (referred to in this Agreement as the "WTO Agreement"). Appropriate flexibility with respect to the time-limit within which such enquiry points are to be established may be agreed upon for individual developing country Members. Enquiry points need not be depositories of laws and regulations.

^{5.} Any Member may notify to the Council for Trade in Services any measure, taken by any other Member, which it considers affects the operation of this Agreement.

VI:4 (a-c);¹⁰⁵ and (v) such nullification or impairment could not have been reasonably anticipated by that Member when the specific commitment was undertaken.¹⁰⁶ Along these lines, the first two criteria are fulfilled because Europe has made commitments for clearing derivatives services for mode 2 pursuant to the Understanding and EMIR spells out the licensing requirements. EMIR's transparency considerations are drawn next to assess whether they could impair the EU's commitments. Surprisingly, Article VI:5 regardless of its pervasive nature has never been interpreted by WTO adjudicatory bodies. The only time a panel had the opportunity to shed light on the provision, in *Mexico–Telecoms*, it neglected to do so for reasons of judicial economy.¹⁰⁷

The EU in its attempt to design a robust regulation for clearinghouses has indulged in adopting measures that can be contested before WTO judiciary on the basis of transparency. WTO Members, whose CCPs have not acquired a recognition and are unable to supply their services in Europe, could contend that EMIR lacks objective and transparent criteria with respect to its licensing requirements. This can be substantiated by the fact that the main criteria on which ESMA and the Commission base their assessments on are not exactly clear. The third-country recognition procedure is driven by motives relating to the clearinghouse's jurisdictional 'creditworthiness'. The Implementing Acts¹⁰⁸ that the Commission adopts reinforce the regulatory framework's lack of transparency exactly because of the nature of their determinations regarding: (i) 'effective supervision and enforcement' that the CCPs are subject to in third countries, and (ii) third-countries' 'legally binding requirements which are equivalent' to EMIR.

These criteria prescribed in EMIR are abstract. The missing determinant is the way they are assessed by the European executive agencies because the requirements themselves leave considerable room for discretion in the appraisal phase. At first glance, these criteria, as

See GATS Article VI:4.Article VI:5 has been defined as 'an effort to operationalize the objectives stated in VI:4, the most important of which was the necessity test', according to the WTO Secretariat in WTO, WPDR, 'Report on the Meeting Held on 11 May 2001', S/WPDR/M/11, 7 June 2001, para. 29.

The GATS entered into force in 1995 and this category captures the measures in place before then.

Panel Report, *Mexico-Telecoms*, para. 5.30.

The Implementing Acts are based on Article 5 of Regulation No. 182/2011 and are highly dependent upon the technical advice on third countries regimes that ESMA produces. The Commission Delegated Regulation (EU) No 153/2013 of 19 December 2012 supplementing EMIR with regard to regulatory technical standards on requirements for central counterparties, on the basis of art. 2 sets out particular conditions in respect of CCP's target member states, types of instruments cleared, its shareholders, margin and collateral, stress tests, compliance, record, outsourcing arrangements, segregation arrangements, membership criteria, and interoperability arrangements. Although numerous criteria are put forward, it is maintained that there is no transparency on the methodology that these criteria are assessed by the EU institutions.

they are articulated in the text of the Regulation, seem quite transparent. However, when read in conjunction with ESMA's advice and the Commission's Acts, they generate further questions. The discrepancy among Members' financial regulatory frameworks requires further clarity with respect to how these legal aspects are assessed. The points on effective supervision and enforcement and legally binding requirements that are equivalent to EMIR are not clear because they are not benchmarks that third countries and their clearinghouses can rely on. Rather, they promulgate some criteria that the EU institutions can construe with a high margin of appreciation. Moreover, confusion can emerge from the discrepancies in the assessment of different jurisdictions.

EMIR's lack of transparency might be inconsistent with GATS Article VI Paragraph 5(a)(i) provision because it can impair or nullify the commitments EU assumed for clearing financial instruments in accordance with the Understanding. In particular, by hindering thirdcountries from acquiring a clear view of the system in place for the implementation of equivalence assessments, Europe could impair its commitments for financial services. More broadly, for violation cases there is a rebuttable presumption of nullification or impairment. 109 However, the special nature of this provision links the concept of nullification or impairment to a substantive infringement of WTO rules, displaying the negotiators' reluctance in restricting their own regulatory autonomy. 110 The burden of proof of nullification/impairment rests with the Member seeking to demonstrate that the application of the equivalence assessment is in violation of Article VI:5. The application of EMIR rules can be characterized as trade restrictive in the sense that service suppliers from third-countries suffer the loss of opportunity to transact with European market participants abroad. The lack of transparency is evidenced in the absence of explicit guidelines that explain what third-countries effective supervision and enforcement might entail, and what would be the parameters for the equivalence assessment, given that financial regulations across the globe are inherently disparate. Conducting these analyses is not an easy task, due to the complexities of Members' financial rulebooks.

OP This presumption is housed in Article 3:8 of the Dispute Settlement Understanding ("DSU") which reads "In cases where there is an infringement of the obligations assumed under a covered agreement, the action is considered prima facie to constitute a case of nullification or impairment. This means that there is normally a presumption that a breach of the rules has an adverse impact on other Members parties to that covered agreement, and in such cases, it shall be up to the Member against whom the complaint has been brought to

agreement, and in such cases, it shall be up to the Member against whom the complaint has been brought to rebut the charge." and has been confirmed by the WTO judiciary. Appellate Body Report, European Communities – Export Subsidies on Sugar, WT/DS265, para. 300. The concept of nullification or impairment also accommodates non-violation complaints in services, GATS Article XXIII:3.

See WTO, Trade in Services, 'Decision on Domestic Regulation', S/L/70, 28 April 1999, para. 23; For a discussion see Delimatsis, supra note 62, p. 39–47.

Nevertheless, more transparent criteria should be put in place for the sake of predictability and in order to inform Members about the precise steps EU institutions take. Transparency is intended to furnish openness to services' trade, and the regulatory framework in question does not seem to facilitate multilateral trade in clearing derivatives.

5.2 ANALYSIS UNDER THE GATS ARTICLE II ON MFN TREATMENT FOR NON-EUROPEAN CLEARINGHOUSES

Non-discrimination constitutes the cornerstone of the multilateral trading system and MFN is the most representative GATS obligation. Article II:1 provides that: "With respect to any measure covered by this Agreement, each Member shall accord immediately and unconditionally to services and service suppliers of any other Member treatment no less favourable than that it accords to like services and service suppliers of any other country." This GATS provision can test the consistency of EMIR's equivalence regime and puts forward that service providers of any Member shall not receive less favourable treatment than like services and service providers of any other Member.

To fall within the scope of MFN, two criteria must be satisfied, which are articulated for our discussion as: (i) that clearing services or clearinghouses from countries that have been deemed 'equivalent' by Europe are 'like' to CCPs from countries that have not; and, (ii) if yes, that the application of the EMIR equivalence assessments extends 'less favourable treatment' ("LFT") to clearinghouses with specific origin in comparison to other countries; if no, the question of LFT would not arise at all. The forthcoming analysis assesses how the GATS Article II:1 conditions can filter EMIR Article 25, in the light of the *Argentina–Financial Services*. This dispute elaborates on the tension between trade and regulation because differential treatment is accorded to Members based on their regulatory frameworks.

5.2.1 'LIKENESS' ASSESSMENT UNDER THE GATS ARTICLE II

The determination of discriminatory behaviour in WTO law depends on the concept of likeness. Like service suppliers from different Members cannot be accorded differential treatment. However, if they are not considered like, they can be treated differently. Extensive WTO jurisprudence on likeness exists in trade of goods, 111 but our focus lies with services. The

38

The Appellate Body, European Communities – Measures Affecting Asbestos and Products Containing Asbestos, WT/DS135, para.102, refers to the requirements promulgated by the GATT working party report on Border Tax Adjustments. These criteria relate to (i) the properties, nature, and quality of the products; (ii) the end-uses of the products; (iii) consumers' tastes and habits or consumers' perceptions and behaviour in

panel in Canada—Autos held that "to the extent that the service suppliers concerned supply the same services, they should be considered like". This statement is drafted broadly, and seems to disregard the complex nature of services and the role of regulation. Additionally, it could restrict the right of Members to regulate the supply of services on the basis of national policy preferences. The GATS likeness determination differentiates from the standards set out by WTO jurisprudence for goods. Allowances must be made for Members' regulatory framework divergences that can complicate the conditions of 'likeness'. Recently, WTO case law has broadened our understanding of how trade norms can filter WTO Members' prudential frameworks. It has also provided guidance on how 'likeness' can be established between service providers from different jurisdictions. The question I address here relates to whether non-European CCPs from country x, which has been deemed to have an equivalent regime by the Commission, are 'like' to clearinghouses from country y, which has not.

The Appellate Body in Argentina – Financial Services held in respect of 'likeness' of the GATS Article II:1 that 'the determination of 'likeness' of services and service suppliers must focus on the competitive relationship of the services and service suppliers at issue'. Additionally, the Appellate Body noted:

"Thus, we consider that the concept of 'likeness' of services and service suppliers under Articles II:1 and XVII:1 of the GATS is concerned with the competitive relationship of services and service suppliers. This is consonant with the Appellate Body's understanding of 'likeness' in the ambit of trade in goods. In EC – Asbestos, the Appellate Body held that the word 'like' in Article III:4 of the GATT 1994 is to be interpreted as applying to products that are in a competitive relationship, and that therefore a determination of 'likeness' under Article III:4 is, fundamentally, a determination about the nature and extent of a competitive relationship between and among products. As the Appellate Body noted, '[i]f there is – or could be – no competitive relationship between products, a Member cannot intervene, through internal taxation or regulation, to protect domestic production.'

Further, in the context of trade in goods, the Appellate Body noted that there is a spectrum of degrees of 'competitiveness' or 'substitutability' of products in the marketplace. The assessment of such a competitive relationship requires a market-based analysis. The Appellate Body also stated that not all products that are in some competitive relationship are 'like products', and that it is difficult,

respect of the products; and (iv) the tariff classification of the products. Cf. Appellate Body Report, *Argentina – Financial Services*, para. 6.30.

¹¹² Appellate Body Report, *Canada – Autos*, para. 10.248. Cf. Panel Report, *EC–Bananas III*, para. 7.322.

Appellate Body Report, *Argentina–Financial Services*, para. 6.24; Cf. Appellate Body Report, European Communities – Measures Prohibiting the Importation and Marketing of Seal Products, WT/DS401, para. 5.82, Appellate Body Report, *EC–Asbestos*, para. 99.

if not impossible, in the abstract, to indicate precisely where on this spectrum the word 'like' falls. In our view, the same is true with respect to 'like services and service suppliers', and, thus, the likeness of services and service suppliers can only be determined on a case-by-case basis, taking into account the specific circumstances of the particular case." 114

Notably, the competition concept is adopted from the GATS Article XVII, and can prove to be a useful guide in the process of assessing whether service suppliers are like. Although the *China–Electronic Payment Services* panel inquired the determination of likeness for both services and service suppliers, 115 the Appellate Body understands these terms in tandem, and suggests they should not be examined in isolation.¹¹⁶ Furthermore, the presumption approach refers to the case that the complainant can establish 'likeliness' by merely illustrating that the measure in question distinguishes between services and service suppliers based exclusively on origin. This 'presumption' has been accepted by numerous panels for trade in goods, ¹¹⁷ and recently adopted by the Appellate Body. ¹¹⁸ Nevertheless, the perimeter of the 'likeness' presumption is narrower for trade in services; this is due to inherent complexities of services sectors, distinctions between services and service suppliers, varying modes of supply, ¹¹⁹ and domestic regulations, which define the realm of operation of service suppliers alongside with consumers' preferences, that all need to be borne in mind. 120 Interestingly, in Argentina–Financial Services the panel concluded that 'it is not the origin per se which determines ... but the regulatory framework inextricably linked to such origin'. 121 The Appellate Body reversed the panel's finding because its analysis erred in fulfilling the presumption of 'likeness' criteria. 122

The Appellate Body in *Argentina – Financial Services*, held that with respect to the applicability of the presumption approach in the context of trade in services:

"While these complexities do not, as a matter of principle, render the presumption approach inapplicable in the context of trade in services, the scope

Panel Report, Argentina–Financial Services, para. 7.166.

¹¹⁴ Appellate Body Report, *Argentina – Financial Services*, paras. 6.25-6.26.

Panel Report, *China–Electronic Payment Services*, paras. 7.698–7.709.

Appellate Body Report, Argentina–Financial Services, para. 6.29.

Panel Reports, Colombia – Indicative Prices and Restrictions on Ports of Entry, WT/DS366, paras. 7.355–7.356; United States – Certain Measures Affecting Imports of Poultry from China, WT/DS392, paras. 7.424–7.432.

¹¹⁸ Appellate Body Report, *Argentina–Financial Services*, paras. 6.38, 6.52, 6.61.

¹¹⁹ Panel Report, *China–Electronic Payment Services*, para. 7.704.

¹²⁰ Ibid. paras. 6.38–6.41.

Appellate Body Report, Argentina–Financial Services, para. 6.61.

of this presumption is more limited than in trade in goods. Whether and to what extent such complexities have an impact on the determination of whether a distinction is based exclusively on origin in a particular case will depend on the nature, configuration, and operation of the measure at issue and the particular claims raised."¹²³

Moreover, the Appellate Body stated that "in keeping with the general rule that the burden of proof rests upon the party that asserts the affirmative of a particular claim, the complainant bears the burden of making a prima facie case that a measure draws a distinction between services and service suppliers based exclusively on origin". According to the Appellate Body, "if a panel finds that the complainant has failed to make a prima facie case that a measure provides for differential treatment based exclusively on origin, then the panel must engage in an analysis of 'likeness' of services and service suppliers on the basis of the relevant criteria adapted to trade in services, as addressed above, before it may proceed to the analysis of less favourable treatment."

These benchmarks for determining 'likeness' between service providers furnish clear filters for evaluating whether clearinghouses from third-countries are like or not. However, case-by-case analysis is required to establish if the conditions are met. It should be mentioned that the burden of proof always lies with the party that asserts an affirmative claim. The role of regulatory frameworks has been stressed by WTO judiciary in the determination of 'likeness' for services/ service-suppliers. Potential complainants that would challenge EMIR equivalence mechanism should either illustrate that differential treatment is extended between the clearinghouses of x and y exclusively on the basis of origin to adhere to the condition of the presumption approach, or encounter whether the regulatory divergence between CCP regulation does not alter the conditions of competition in the traditional 'likeness' determination. If it does not and the regulatory frameworks of x and y follow the same standards and implementation, 127 then their clearinghouse should be considered 'like'. In the case where there are fundamental discrepancies between the countries' clearing-derivatives regimes, then 'likeness' would be more challenging to prove.

Appellate Body Report, Argentina – Financial Services, para. 6.40. See also paragraph 6.52 of the Appellate Body Report.

Appellate Body Report, Argentina – Financial Services, para. 6.42.

¹²⁵ Appellate Body Report, Argentina – Financial Services, para. 6.43.

Appellate Body Report, United States – Measures Affecting Imports of Woven Wool Shirts and Blouses from India, WT/DS33, paras. 14, 335.

See, for example, FSB, supra note 79.

5.2.2 'LFT' ASSESSMENT UNDER THE GATS ARTICLE II

LFT is embedded in both GATS Articles II:1 and XVII and WTO judiciary holds that both provisions employ the same standard. The Appellate Body in *Argentina – Financial Services* offered its appraisal on the nature of "treatment no less favourable" housed in those two Articles of the GATS. As regards Article II:1 of the GATS, noted:

"Turning to Article II:1 of the GATS, we note that this provision does not further define the term 'treatment no less favourable'. Furthermore, we recall that Article XVII:1 contains a national treatment obligation, whereas Article II:1 contains a most-favoured-nation obligation. Nonetheless, the operative parts of these provisions are similarly worded, in that a Member is required to accord 'treatment no less favourable' to 'services and service suppliers of any other Member'. Both provisions serve the function of prohibiting discrimination against foreign services and service suppliers vis-à-vis like services and service suppliers. Although the immediate context of this term in Articles II:1 and XVII:1 is not expressed in identical words, and Article II does not contain the elaboration of the 'less favourable treatment' standard found in Articles XVII:2 and 3, the Appellate Body has found that both provisions share the essential nature of anti-discrimination provisions, and cover both de jure and de facto discrimination. 129 Thus, the elaboration on the meaning of the term 'treatment no less favourable' contained in Article XVII, and in particular in Article XVII:3, should also be pertinent context to the meaning of the same term in Article II:1.

We note that, in EC – Bananas III, the Appellate Body upheld the panel's finding that the EC licensing procedures in that dispute conferred less favourable treatment under both Article II and Article XVII of the GATS. In so doing, the Appellate Body based its findings under both provisions on the same notion of 'less favourable treatment'. Specifically, the Appellate Body agreed with the panel that various aspects of the EC licensing procedures at issue created less favourable conditions of competition for service suppliers of the complainants' origin. 130 The Appellate Body's findings indicate that, on substance, the concept of 'treatment no less favourable' under both the mostfavoured-nation and national treatment provisions of the GATS is focused on a measure's modification of the conditions of competition. This legal standard does not contemplate a separate and additional inquiry into the regulatory objective of, or the regulatory concerns underlying, the contested measure. Indeed, in prior disputes, the fact that a measure modified the conditions of competition to the detriment of services or service suppliers of any other Member was, in itself, sufficient for a finding of less favourable treatment under Articles II:1 and XVII of the GATS."131

¹²⁸ Appellate Body Report, Argentina–Financial Services, paras. 6.105, 6.106. Cf Appellate Body Report, EC–Bananas III, para. 233.

¹²⁹ (footnote original) Appellate Body Report, EC – Bananas III, para. 233

¹³⁰ (footnote original) Appellate Body Report, EC – Bananas III, paras. 240-248.

Appellate Body Report, *Argentina – Financial Services*, paras. 6.105-6.106. See also Panel Report, *EU – Energy Package*, para. 7.489.

The Appellate Body in *Argentina – Financial Services* crystallized the notion of LFT. It underlined that both *de jure* and *de facto* discrimination is covered by the scope of Article II and it made clear that Article II is informed in determining the notion of 'less favourable treatment' by the more elaborate language included in Article XVII of the GATS. Most importantly, for both provisions the crucial element that qualifies whether certain measures extend LFT is based on the modification of the conditions of competition to the benefit of services or service suppliers of a Member in comparison to like services or service suppliers of another Member – as stipulated in Article XVII:3.¹³²

Jurisprudence developed for goods agreements does not always chime with the mechanics of the GATS due to their structural differences.¹³³ Nevertheless, the GATS legal requirement for establishing LFT has been recently delineated by the Appellate Body for trade in financial services, as said. A measure fails to confer 'treatment no less favourable' if it modifies the conditions of competition to the detriment of services or service suppliers of any other Member in comparison to like services or service suppliers of, respectively, any other country or the Member imposing the contested measure.¹³⁴ Thus, the driving force of LTF is the relation between the measure in question and whether this measure alters the conditions of competition between like service suppliers.¹³⁵

Regulatory frameworks admittedly affect trade in services. Indeed, it all depends on the standard of review for LFT to determine whether differential treatment is extended or not. Evaluating whether a measure leads to modifying the conditions of competition at the expense of like service suppliers 'must begin with scrutiny of the measure, including consideration of the design, structure, and expected operation of the measure at issue'. However, this type of regulatory assessment will not go beyond the content of the GATS, and change its internal balances. The panel in *Argentina–Financial Services* attempted an alternative to the text of the

Article XVII reads: Formally identical or formally different treatment shall be considered to be less favourable if it modifies the conditions of competition in favour of services or service suppliers of the Member compared to the like services or services suppliers of any other Member.

The LTF standard in the GATT is identical to the one in the GATS; see Appellate Body Report, EC-Seals Products, para. 5.90. The TBT Agreement does not employ the same LTF legal standard because it requires an additional step not justifiable in the GATS geometry, namely the 'legitimate regulatory distinction'; see Appellate Body Report, United States – Measures Affecting the Production and Sale of Clove Cigarettes, WT/DS406, para. 182.

¹³⁴ Appellate Body Report, *Argentina–Financial Services*, para. 6.151.

¹³⁵ See Appellate Body Report, *EC–Bananas III*, paras. 244, 246; Panel Report, *China–Electronic Payment Services*, paras. 7.712, 7.714.

Appellate Body Report, Thailand — Customs and Fiscal Measures on Cigarettes from the Philippines, WT/DS371, para. 134.

GATS treaty interpretation of the LFT, which resembles the approach devised by the Agreement on Technical Barriers to Trade (also known as the "TBT" Agreement). The panel's analysis went beyond just taking account of the regulatory aspects relating to services that may affect the conditions of competition, and attempted to justify LFT on 'certain regulatory distinctions'. This stance disregards the broader GATS taxonomy, which favors Members pursuing their national policies and at the same time provides the prudential exception that financial regulations can be justified under. Contrary, the TBT Agreement has this regulatory distinction in the determination of LFT, but does not furnish exceptions as the GATS does. Ultimately, the Appellate Body did not endorse the panel's interpretation. It stated that to the degree that evidence pertaining to the regulatory aspects has a bearing on the conditions of competition, it might be taken into consideration, subject to the specific characteristics of the case.

The GATS Article II:1 LFT status quo provides clarity as to how like service suppliers are to be treated. If national regulatory frameworks impact on the conditions of competition between like service suppliers, then differential treatment at odds with the MFN principle is extended. The 'less favourable treatment' test does not bear in mind the regulatory intent and/or objectives but rather gravitates around the real effects as the result of the modification of the conditions of competition for third-country 'like' services or service suppliers. One may wonder to what degree the European clearinghouse regulation affects the opportunities of thirdcountry CCPs planning to provide their services in the EU market. Applying the stated twopronged test presupposes that the clearinghouses by country x, which has been deemed to have an 'equivalent' regulatory framework by the Commission, are 'like' to clearinghouses from country y, which has not. Then as soon as 'likeness' is established, LFT is extended by Europe because CCPs from x can supply their services to European financial institutions, while CCPs from y cannot. To illustrate, we first assume that the central-clearing regime of India, which has been deemed equivalent by the EU, and the regulatory framework of Argentina, which has not, are considered to provide similar standards. Accordingly, their clearinghouses would be deemed like by the WTO judiciary. Then, establishing LTF would only rely on proving that

¹³⁷ Panel Report, Argentina–Financial Services, paras. 7.212, 7.232.

The GATS prudential exception is discussed below. See Carlo Maria Cantore, 2018, The Prudential Carve-Out for Financial Services: Rationale and Practice in the GATS and Preferential Trade Agreements (Cambridge: Cambridge University Press).

¹³⁹ Appellate Body Report, Argentina–Financial Services, paras. 6.151–6.153.

¹⁴⁰ Ibid. para. 6.127.

the EU regulation changes the terms-of-competition between the CCPs of India and Argentina, by disallowing the latter to provide their services in Europe. EMIR regime affects the conditions of competition because it favors clearinghouses from certain jurisdictions and forecloses the European market to others. Consequently, the EMIR regime might result in violation of the GATS Article II. Nevertheless, the GATS provides regulatory flexibility and Article VII, alongside with Annex on Financial Services paragraph 3, furnish a safe harbour from MFN, as long as their conditions are satisfied.

5.3 ANALYSIS UNDER GATS ARTICLE VII ON RECOGNITION AGREEMENTS FOR FINANCIAL SERVICES

In response to the G-20 accord, ¹⁴¹ regulators have devised their frameworks for clearinghouses. Subsequently, they carry out their own evaluations of third-country CCP rules to determine whether the regimes are equivalent to theirs. These assessments determine whether other Members' clearinghouses can furnish their services or not. In a similar vein, EMIR promulgates that the Commission publishes equivalence decisions of third-country CCP frameworks. Accordingly, some jurisdictions are deemed equivalent while others are not. The clearinghouses of Members that are extended recognition of their regimes find it less burdensome to offer their services in Europe than clearinghouses from Members that are not. However, the GATS sets out that 'a Member may recognize ... requirements met, or licenses or certifications granted in a particular country'. ¹⁴² The rationale of Article VII lies in furthering trade integration through recognition, while disallowing discrimination. ¹⁴³ In addition to Article VII and closer to our analysis, the Annex on Financial Services reads: 'A

_

See supra, footnote 13. The G20 explicitly committed to improve the OTC derivatives markets by the following mechanism, "All standardized OTC derivative contracts should be traded on exchanges or electronic trading platforms, where appropriate, and cleared through central counterparties 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."

GATS Article VII:1. The entire GATS provision reads as follows: For the purposes of the fulfilment, in whole or in part, of its standards or criteria for the authorization, licensing or certification of services suppliers, and subject to the requirements of paragraph 3, a Member may recognize the education or experience obtained, requirements met, or licenses or certifications granted in a particular country. Such recognition, which may be achieved through harmonization or otherwise, may be based upon an agreement or arrangement with the country concerned or may be accorded autonomously.

See Americo Zampetti, 'Market Access through Mutual Recognition: The Promise and Limits of GATS Article VII', in P. Sauvé and R. Stern (eds.), GATS 2000: New Directions in Services Trade Liberalization (Washington, DC: Brookings Institution Press, 2000), pp. 283–306. See also Kalypso Nicolaidis and Joel Trachtman, 'From Policed Regulation to Managed Recognition: Mapping the Boundary of GATS', in Joel Trachtman, The International Economic Law Revolution and the Right to Regulate (London: Cameron May, 2006), p. 315.

Member may recognize prudential measures of any other country in determining how the Member's measures relating to financial services shall be applied.' These recognition provisions stipulate that agreements can be concluded either mutually or unilaterally, and spell out specific conditions that shall be respected.

First, transparency in the form of notifying recognition measures to the Council for Trade in Services is prescribed in the GATS.¹⁴⁵ This obligation can potentially increase the WTO Members' understanding of what are the driving forces of recognition agreements, and ultimately contribute to further integration.¹⁴⁶ However, for trade in financial services, openness through transparency is not attained because Members do not notify any of their recognition measures.¹⁴⁷ This does not imply that recognition in financial services sectors between Members is not accorded, but rather that the transparency obligation is not fulfilled. As a result, since the practice of states does not facilitate trade openness, it becomes more difficult to pursue recognition with WTO Members that are not 'like-minded' partners. Most importantly, this lack of transparency has implications on restricting future recognition agreements. The second obligation requires that a Member 'shall afford adequate opportunity for other interested Members to negotiate their accession to such an agreement or arrangement or to negotiate comparable ones with it'.¹⁴⁸ The Annex clarifies in that regard, that equivalent

14

GATS Annex, para. 3(a). The relevant provision mandates: A Member may recognize prudential measures of any other country in determining how the Member's measures relating to financial services shall be applied. Such recognition, which may be achieved through harmonization or otherwise, may be based upon an agreement or arrangement with the country concerned or may be accorded autonomously.

GATS Article VII:4. The relevant paragraph reads as follows: Each Member shall:

⁽a) within 12 months from the date on which the WTO Agreement takes effect for it, inform the Council for Trade in Services of its existing recognition measures and state whether such measures are based on agreements or arrangements of the type referred to in paragraph 1;

⁽b) promptly inform the Council for Trade in Services as far in advance as possible of the opening of negotiations on an agreement or arrangement of the type referred to in paragraph 1 in order to provide adequate opportunity to any other Member to indicate their interest in participating in the negotiations before they enter a substantive phase;

⁽c) promptly inform the Council for Trade in Services when it adopts new recognition measures or significantly modifies existing ones and state whether the measures are based on an agreement or arrangement of the type referred to in paragraph 1

For an analysis that argues that like-minded countries tend to conclude mutual recognition agreements ("MRAs"), see Juan A. Marchetti and Petros C. Mavroidis. 'I now recognize you (and only you) as equal: An anatomy of (mutual) recognition agreements in the GATS', Regulating Trade in Services in the EU and the WTO (Cambridge: Cambridge University Press, 2012), p. 415.

This position is premised on research conducted on the Notifications Database of the WTO. It is striking that there is no recognition agreement on financial services notified to the Council, pursuant to GATS Article VII:4, after 2010. See https://docs.wto.org/dol2fe/Pages/FE_Search/FE_S_S003.aspx (lastly accessed on 29 September 2019).

See GATS Article VII:2, Annex on Financial Services para. 3(b). These provisions read as follows: "A Member that is a party to an agreement or arrangement of the type referred to in paragraph 1, whether existing or future, shall afford adequate opportunity for other interested Members to negotiate their accession to such

regulation, supervision, and enforcement are of vital importance for financial services. It should be understood that in practice Members that lack the regulatory expertise and the supervisory and/or enforcement resources are not necessarily offered adequate opportunity to conclude recognition agreements due to the complexities involved in these processes, as discussed above. Third, recognition agreements shall not be either discriminatory or constitute a disguised trade restriction.¹⁴⁹

At this stage, an interpretative comment on the relation between GATS Article VII and the Annex paragraph 3 is required to shed light on the applicable provisions for the recognition of prudential measures. At first, the Annex provision on Recognition is a *lex specialis* to the GATS Article VII. However, we should underscore that the existence of Paragraph 3 of the Annex does by no means lead to the inapplicability of the broader GATS provision. This can be convincingly substantiated by an *a contrario* interpretation of the Annex Paragraph 3(c) which explicitly stipulates that: *Where a Member is contemplating according recognition to prudential measures of any other country, paragraph 4(b) of Article VII shall not apply.* Notably, the founding fathers consciously discarded only the applicability of paragraph 4(b) of Article VII for financial services sectors; namely, the Members' transparency obligation in relation to the notification of potential ongoing recognition procedures. As a result, it emanates from this reading that all the other GATS Article VII provisions still apply for financial services with the particular specificities attached to Paragraphs 3(a) and (b) of the Annex.

Given that most GATS Article VII obligations remain applicable for financial services, it is worthwhile briefly discussing the role of Article VII:5 in this context.¹⁵⁰ This provision

an agreement or arrangement or to negotiate comparable ones with it. Where a Member accords recognition autonomously, it shall afford adequate opportunity for any other Member to demonstrate that education, experience, licenses, or certifications obtained or requirements met in that other Member's territory should be recognized"; and "A Member that is a party to such an agreement or arrangement referred to in subparagraph (a), whether future or existing, shall afford adequate opportunity for other interested Members to negotiate their accession to such agreements or arrangements, or to negotiate comparable ones with it, under circumstances in which there would be equivalent regulation, oversight, implementation of such regulation, and, if appropriate, procedures concerning the sharing of information between the parties to the agreement or arrangement. Where a Member accords recognition autonomously, it shall afford adequate opportunity for any other Member to demonstrate that such circumstances exist.", respectively.

GATS Article VII:3. This provision stipulates that "A Member shall not accord recognition in a manner which would constitute a means of discrimination between countries in the application of its standards or criteria for the authorization, licensing or certification of services suppliers, or a disguised restriction on trade in services."

GATS Article VII:5. The provision reads as follows: Wherever appropriate, recognition should be based on multilaterally agreed criteria. In appropriate cases, Members shall work in cooperation with relevant intergovernmental and non-governmental organizations towards the establishment and adoption of common international standards and criteria for recognition and common international standards for the practice of relevant services trades and professions.

spells out a best-effort obligation for Members to negotiate common international standards and criteria for recognition in international fora. This provision is not excluded from the scope of financial services. In principle, Members, when appropriate, must adopt the standards put forward by international standard setting organizations. Perhaps the key condition enclosed to this provision is 'in appropriate cases', because it leaves considerable room for maneuver to WTO Members. Especially, the intricacies associated with financial regulation and the stability considerations enshrined in the prudential carve-out might strip this provision of meaning for financial services recognition agreements. Arguably, it would be a long shot to claim that WTO Members have a hard obligation to adopt the standards promulgated by the Bank for International Settlements ("BIS") and the International Organization of Securities Commissions ("IOSCO") for clearing services 151 based on this GATS article.

EMIR equivalence assessments should fall under the unilateral recognition category of Article VII. Nevertheless, the collaboration between regulatory agencies should not be underestimated, as cooperation arrangements between ESMA and third-country regulators are required. In the light of the GATS Article VII obligations, clearinghouses from Argentina, for example, should, in principle, be afforded adequate opportunity to negotiate a recognition procedure as CCPs from India. However, problematic features regarding the process followed by the European Commission in the conclusion of equivalence decisions shall be underscored. First, the transparency obligation to notify recognition agreements in accordance with Article VII:1 is not fulfilled. Second, the potential discretionary nature of the equivalence assessments' application in favor of Members with higher regulatory leverage and bigger clearinghouses seems to suggest that adequate opportunity to negotiate recognition agreements has not been extended evenly to Members. In the absence of formal criteria, the European Commission chooses on a discretionary basis the WTO Members with which it conducts equivalence assessments, irrespective of similar equivalent standards between thirdcountries.¹⁵² Nonetheless, it would be for WTO judiciary to find whether EMIR's possible GATS-inconsistencies could be justified under Article VII on a case-by-case basis.

-

For the relevant standards, see Committee and Settlement Systems and Technical Committee of International Organization of Securities Commissions, Principles for financial market infrastructures, April 2012, available here: https://www.bis.org/cpmi/publ/d101a.pdf (lastly accessed on 29 September 2019).

See, for example, note 79.

5.4 ANALYSIS UNDER THE GATS PRUDENTIAL CARVE-OUT FOR FINANCIAL SERVICES

The prudential carve-out ("PCO") appears to provide wide leeway to financial regulators. The autonomy to legislate prudential rules for the sake of financial stability, among other objectives, is encouraged by the PCO, even if these rules do not conform with the GATS. However, despite the broad margin offered to regulators, the provision reads in the second sentence that prudential rules must not 'be used as a means of avoiding' trade disciplines. This 'anti-circumvention' clause exists to delimit the range of regulatory space of Members in financial services. To date, our knowledge of what type of measures can be justified under the PCO is quite restricted as there is limited case law elaborating on the prudential exception. The prudential exception has been only interpreted once in *Argentina–Financial Services*. In the light of this dispute's findings, we discuss the PCO legal standards while investigating whether EMIR's possible GATS inconsistencies can fall within its scope.

The panel dealing for the first time with the prudential exception developed an analysis that employs three requirements for measures to fall under its remit.¹⁵⁵ The scope of the PCO constitutes the first requirement. It was hotly debated between Panama and Argentina whether all types of 'measures affecting the supply of financial services',¹⁵⁶ or only 'domestic regulation', in the sense of the GATS Article VI, fall under the purview of paragraph 2(a).¹⁵⁷ In response to it, the Appellate Body adopted the panel's interpretation and ruled that the PCO scope comprises all the measures that affect the supply of financial services.¹⁵⁸

GATS Annex para. 2(a). The text of this provision stipulates that "Notwithstanding any other provisions of the Agreement, a Member shall not be prevented from taking measures for prudential reasons, including for the protection of investors, depositors, policy holders or persons to whom a fiduciary duty is owed by a financial service supplier, or to ensure the integrity and stability of the financial system. Where such measures do not conform with the provisions of the Agreement, they shall not be used as a means of avoiding the Member's commitments or obligations under the Agreement."

The wording of the prudential exception is in juxtaposition to the chapeau of GATS Article XIV which presupposes a necessity assessment of measures, see Panagiotis Delimatsis and Bernard Hoekman (2018), 'National Tax Regulation, Voluntary International Standards, and the GATS: Argentina–Financial Services', World Trade Review, 17(2), 272.

Panel Report, Argentina–Financial Services, paras. 7.853–7.945.

GATS Annex para. 1(a). This provision reads as follows: This Annex applies to measures affecting the supply of financial services. Reference to the supply of a financial service in this Annex shall mean the supply of a service as defined in paragraph 2 of Article I of the Agreement.

Both the panel and the Appellate Body sided with the argument that all measures fall within the scope of the PCO. This reasoning was adopted because it better reflects the GATS rationale, illustrated in paras. 3 and 4 of the preamble, and better captures the content of para. 2(a) and the context of the Annex. See Panel Report, Argentina–Financial Services, paras. 6.825, 7.847; Appellate Body Report, *Argentina–Financial Services*, paras. 6.253–6.262.

¹⁵⁸ Ibid. para. 6.262

As regards the meaning of the word "affecting", the panel in *Argentina-Financial Services* referred to the Appellate Body's interpretation, put forward in *EC – Bananas III*, and found:

"[I]n determining whether the measure 'affects' the supply of financial services within the meaning of paragraph 1(a) of the Annex on Financial Services, the Panel can be guided by this jurisprudence of the Appellate Body. This leads us to the view that the word 'affecting' in paragraph 1(a) of the Annex on Financial Services has a broader scope than such terms as 'regulating' or 'governing' and therefore covers any measure that has 'an effect on' the supply of financial services." ¹⁵⁹

Further the Appellate Body in *Argentina-Financial Services* held that the fact that paragraph 2(a) covers infringements of obligations under "any provisions of the Agreement" implies that this provision "could be invoked to justify inconsistencies with all of a Member's obligations under the GATS". ¹⁶⁰ In specific, the Appellate Body noted:

"These include, for example, a Member's most-favoured-nation treatment obligation under Article II, market access commitments under Article XVI, or national treatment obligation under Article XVII. This indicates that, for example, measures which are of the types listed in Article XVI:2, and which impose market access restrictions for prudential reasons, could potentially fall within the scope of paragraph 2(a). The type of measure taken by a Member (such as market access restrictions) and the provision of the GATS contravened by such measure (such as Article XVI) are distinct, but related, concepts." ¹⁶¹

Moreover, the second requirement introduced by the panel pertains to measures taken 'for prudential reasons'. This criterion is further divided by the panel into two separate analyses for the purposes of judicial review. Firstly, it shall be determined whether the rationale behind Members' regulatory measures are prudential 'reasons', in the sense that the measures act to prevent a risk, injury or danger that does not necessarily have to be imminent'. Secondly, it shall be illustrated, based on the word 'for' in paragraph 2(a), whether there is a 'rational relationship of cause and effect between the measure and the prudential reason'. The rational link between the regulatory measure and the prudential reason lies with the 'adequacy' of the first, through its design, to attain the desired outcome. Assuming that a rational relationship

¹⁵⁹ Panel Report, *Argentina – Financial Services*, paras. 7.855.

¹⁶⁰ Appellate Body Report, *Argentina – Financial Services*, para. 6.255.

¹⁶¹ Ibid.

Panel Report, Argentina-Financial Services, para. 7.879. Cf. paras. 7.904, 7.937, and 7.946.

¹⁶³ Ibid. para. 7.889.

¹⁶⁴ Ibid. para. 7.891.

exists, the third requirement of the PCO is that the measure in question shall 'not be used as a means of avoiding the Member's commitments or obligations under the Agreement'. 165

The WTO case law drew distinctions between the terms "measures for prudential measures" and "prudential measures" and did not consider them synonyms for the purposes of interpreting the PCO:

"The Panel is not convinced [...] that the two concepts - 'measures for prudential reasons' and 'prudential measures' – signify the same thing or have the same effects. Firstly, we note that the prudential exception does not speak of 'prudential measures' but of 'measures for prudential reasons'. We therefore consider that it is the reason which must be 'prudential' and not the measure per se. The meaning of the two expressions cannot be the same and, in our opinion, this is an important aspect to be borne in mind when interpreting this provision. In other words, the GATS does not seek to identify measures that could be characterized as specifically prudential, such as those usually cited in the context of the standards defined by the Basel Committee on Banking Supervision. 166 Nor does paragraph 2(a) of the Annex on Financial Services refer to any international norm to be used as a guide when deciding on the nature of a measure in the light of the Agreement. Rather, instead of exempting a specific type of measures from the obligations and commitments under the GATS, the exception makes it possible to exempt or exonerate any measure affecting the supply of financial services that has been taken 'for prudential reasons,"167

Importantly, as mentioned above, the panel in *Argentina-Financial Services* concluded, in a finding not reviewed by the Appellate Body, that a measure is adopted "for" prudential reasons when there is a "rational relationship of cause and effect" between the measure in question and the prudential reason provided:

"Hence, it seems to us that the use of the word 'for' in the phrase 'measures for prudential reasons' denotes a rational relationship of cause and effect between the measure and the prudential reason. Thus, the Member taking the measure in question must demonstrate that in its design, structure or architecture there is a rational relationship of cause and effect between the measure it seeks to justify under paragraph 2(a) and the prudential reason provided. A central aspect of this rational relationship of cause and effect is the adequacy of the measure to the prudential reason, that is, whether the measure, through its design, structure and architecture, contributes to achieving the desired effect. Whether a measure has been taken 'for prudential reasons', that is, whether there is a rational relationship of cause and effect between the measure and the

l65 Ibid. para. 7.945.

⁽footnote original) See the 'Core principles for effective banking supervision', established by the Basel Committee on Banking Supervision, in particular Principles 14 to 29 relating to 'prudential regulations and requirements' (September 2012 version).

Panel Report, Argentina – Financial Services, para. 7.861.

reason, can only be determined on a case-by-case basis, taking account of the particular characteristics of each situation and each dispute." ¹⁶⁸

Furthermore, the prudential carve-out offers Members' regulators extended room for maneuver. In principle, measures that seek to protect the safety and soundness of financial systems fall within its purview. However, as demonstrated by recent WTO case law, certain checks-and-balances exist for the prudential carve-out (e.g. they must be adopted for prudential reasons and they shall not be used as a means of circumventing other GATS obligations and/or commitments). These filters scrutinize the measures at issue. The 'rational relationship of the cause and effect' requirement, conceptualized by the panel, limits to a substantial degree the wide scope of the prudential exception. At the same time, the PCO scope is still wider than the exceptions of GATS Article XIV, which presupposes necessity. Thus, regulators, while crafting their prudential rules, should take into consideration that their financial regimes should not circumvent trade disciplines and should be fit for the purpose they aspire to achieve.

As an alternative to this mainstream interpretation of the prudential carve-out that understands the PCO as a GATS exception-type provision, Cantore offers an alternative interpretation of the prudential carve-out where "measures adopted in pursuance of prudential objectives are not covered by the discipline of the GATS, even if the Member has listed specific commitments and the new regulations may have a detrimental impact on them". This approach is put forward on the basis of (i) the absence of a chapeau in the text of the PCO – which is an essential element in all the GATT and GATS exception provisions, (ii) the inclusion of a non-exhaustive list of prudential objectives – in sharp contrast to the fixed and exhaustive list of policies embedded in exception provisions, and (iii) the negotiating history of the prudential carve-out. To

The forthcoming analysis proceeds with the ordinary interpretation of the PCO. Notably, if the European equivalence regime for third-country clearinghouses was found in breach of a GATS provision, one would wonder if it could be justified under the prudential exception. The first step is to ascertain whether the measures for recognizing non-EU CCPs fall under the scope of the PCO. The discussion above verifies that the European regulatory

Panel Report, Argentina – Financial Services, para. 7.891.

Carlo Maria Cantore, The Prudential Carve-Out for Financial Services: Rationale and Practice in the GATS and Preferential Trade Agreements (Cambridge: Cambridge University Press), p. 187.

¹⁷⁰ Ibid, p. 168-224.

measures undoubtedly affect the supply of financial services and the first PCO requirement is fulfilled. Contrary to the first, the second requirement is quite tricky. With regard to the first prong, the fact that the EMIR equivalence regime is crafted to promote OTC derivatives market stability is well-known. Accordingly, it would not be a problem for this regulatory measure to argue that it serves prudential reasons.¹⁷¹ Nevertheless, the challenging task would be to demonstrate that there is a 'rational relationship' between the equivalence mechanism, the application of which might be characterized as discriminatory or ill-transparent, and the prudential objective. A case-by-case qualitative evaluation is necessitated to determine whether such a relationship exists and the WTO judiciary would have to address this issue based on the parties' submitted evidence. The writer's view is that it would be difficult for the EU to draw a cause and effect link between this type of trade-barrier and the rationale of financial stability. Although EMIR equivalence regime undoubtedly safeguards the integrity of financial systems, it is contestable whether the application of equivalence assessments is the adequate instrument to meet this end. In principle, the design of regimes such as equivalence or substituted compliance promotes financial stability but their implementation might not be appropriate to achieve their goals.

That said, if the European regulatory measure in question is found to be discriminatory or lacking in transparency by the WTO judiciary, it would be challenging to substantiate the existence of a rational link between the application of equivalence rules and financial stability. Furthermore, even if this relationship is established, the non-circumvention criterion is the last stop before the PCO conditions are satisfied. This requirement also heavily relies on a case-by-case analysis and a conclusive answer cannot be given in respect of the EMIR measures at issue. Given that the prudential exception has never been invoked in relation to regulatory measures touching on financial stability, it is very difficult to predict how the WTO judiciary would conduct its analysis in that regard. Consequently, the PCO is still an uncharted territory – terra incognita.

6. SUMMARY OF THE FINDINGS

The contribution of this *Chapter* has sought to evaluate the tension between financial regulation and WTO law by taking the EU's clearinghouse regulation as a case study.

The panel in *Argentina–Financial Services* underlined that the concept of 'prudential reasons' is an evolving one (para. 7.870), while the 'stability of the financial system' is an overarching prudential consideration enshrined in the PCO.

Completion of this exercise allows for three significant deductions with respect to the future liberalization of financial services within the GATS legal architecture. First, the analysis demonstrates that regulatory equivalence assessments of financial services' foreign jurisdictions can negatively impact on the terms-of-trade and conditions of competition between WTO Members. Second, the findings indicate that smaller countries without regulatory leverage are less likely to gain access to the European market because of the structural problems of the rules on equivalence. Third, and perhaps more interestingly, this contribution has found that the Members' vast flexibility to regulate financial services (provided by the GATS) does not make use of all avenues provided by the multilateral trading system to achieve further integration.

In all these cases, this study has evidenced that the most problematic issues arise with respect to the GATS principle of non-discrimination and transparency. Namely, in terms of transparency, problems arise not only in publishing substantial elements of the regulatory frameworks *per se* but also in disclosing recognition agreements. With respect to non-discrimination, both procedural and substantive GATS legal disciplines are potentially disregarded by EMIR equivalence rules and the application thereof. Specifically, the discretionary and politically driven application of rules seems to advantage some countries over others.

These findings can be explained by the absence of coordination and synergies between the trade and finance administrations of Members, such as the EU in our case study. In the aftermath of the crisis, it became clear that regulation of financial services, including the one of clearinghouses, was crucial to safeguard the integrity of global financial systems. That said, our example challenges whether the means employed by financial regulators always justify the end sought. As a result, the conformity of the GATS rulebook by domestic financial regulators is put in question. The outcome of the tension between financial services regulation and liberalization seems hard to reconcile.

The importance of a right balance between financial regulation and liberalization extends far beyond a pure legal argument. Ultimately, combining financial regulatory capacity with the benefits of trade in financial services could and should translate into more integration for WTO Members.

A starting point towards this goal could be to explore less trade-restrictive means available at the WTO, such as the application of non-differential treatment in financial

rulebooks. Additionally, international standards for the harmonization of transnational derivatives clearing frameworks in parallel with monitoring by international standard setting organizations and supervisory cooperation by regulators could be even more effective. These may usefully boost the unfulfilled potential of financial services liberalization and at the same time achieve the legitimate objectives set by financial regulators. By using these tools, WTO Members do not derogate from their GATS financial services obligations and they re-start using the avenues available at the WTO.

This *Chapter* did not intend to exhaust the question of available WTO tools capable of striking a fair balance between financial services liberalization and regulation. Rather, its purpose was to start a much-needed debate on an increasingly important, but scarcely discussed subject: the relationship between financial services regulation and WTO rules. We have demonstrated that the current system of financial regulation leaves important gaps on the road to trade liberalization. In addition, we have also suggested that important avenues for tackling these gaps may be found within the WTO legal framework itself. The questions that remain are when and under which conditions these avenues will reach their full potential.

PART III: FINANCIAL REGULATION AND THE PLURILATERAL TRADING SYSTEM

The Liberalization of Financial Market Infrastructure services in International Economic Agreements

1. Introduction

One of the most contentious issues of the ongoing Brexit negotiations is the treatment of clearinghouses once the UK is out of the European single market. UK's departure gives rise to problems relating to the supervision of clearinghouses for euro-denominated products. Additionally, clearinghouses are major profit generators for financial venues and that is why Frankfurt intensifies its attempts in attracting London's business. 172 Ultimately, the relationship that the EU and the UK will strike will define the relationship of their financial The scenario that seems more likely today would envisage an economic institutions. integration agreement similar to the Canada-EU Comprehensive Economic and Trade Agreement ("CETA"). Understanding how financial services liberalization works in trade agreements is crucial to gain a broader perspective of the international supply of financial services. Financial markets are so interconnected that regulation of one state fundamentally impacts on other jurisdictions and they affect trade flows as well. This explains the US involvement and strong advocacy as regards the Brexit plans of clearinghouses. ¹⁷³ The Commodity Futures Trading Commission ("CFTC"), the US derivatives regulator, opposes the current plans because market disruptions could emerge and even threats to ban European banks from US financial market infrastructure. Thus, the regional integration of financial services is crucial for the operation of financial market infrastructure. Shedding light on the liberalization of regionalism and explaining its elements are this study's purpose

In particular, this *Chapter* aims to (i) map out how financial services' regionalism, illustrated by Economic Integration Agreements ("EIAs"),¹⁷⁴ compares and contrasts with the liberalization of financial services at the multilateral trading system, and to (ii) investigate the

⁷² See Financial Times, Philipp Stafford https://www.ft.com/content/abc6d4e4-93f1-11e8-b67b-b8205561c3fe.

See Financial Times, Philip Stafford https://www.ft.com/content/f9ba5588-d21a-11e8-a9f2-7574db66bcd5.

This Chapter has opted for using the term EIA, as employed in Article V of the General Agreement on Trade in Services ("GATS"), because securities' clearing and settlement services are embedded in international trade agreements regulating trade in services. However, the terms Preferential Trade Agreement (PTA) or Regional Trade Agreement ("RTA") can be used interchangeably since they refer to the same type of agreements.

role of financial regulations in that context. The increasing importance of regionalism in international trade, while multilateral negotiations under the World Trade Organization ("WTO") have stalemate effects, makes this exercise highly relevant.¹⁷⁵. One of the EIAs' objectives is to decrease or eliminate the barriers to trade in services and investment among their Members. This study assesses the liberalization depth of financial securities' *clearing and settlement* services in EIAs. To that end, we evaluate how the regulation of international trade contributes to the integration of financial services, on the one hand, and explore the transnational dynamics and trends that explain the integration of the service's sector in question, on the other. The recent proliferation of concluded EIAs on trade in services underscores their importance for international trade and policy, and at the same time brings into the spotlight the need for a better understanding of the plurilateral trading system's ramifications in the liberalization of services.

Carrying out this exercise is crucial to delineate the relationship between trade in services under disparate legal orders, namely, under the WTO and under EIAs. The mechanics and asymmetric architecture of the General Agreement on Trade in Services ("GATS")¹⁷⁶ have been examined thoroughly by literature and by the previous *Chapter* in relation to the consistency of the EU rules of 'third-country equivalence'. However, it is worth highlighting that the liberalization of trade in services is principally contingent on WTO Members' GATS commitments under Articles XVI, and XVII on market access, and national treatment, respectively.¹⁷⁷ The research question of this *Chapter* is not concerned with the GATS levels of liberalization *per se*, but rather the liberalization depth in EIAs. In that endeavor, the WTO Members' commitments under the GATS are used as the benchmark to measure how much beyond them the undertaken commitments in EIAs extend. The methodology of this study is developed in detail in the next section. The forthcoming paragraphs summarize the importance

_

See for example, Jo-Ann Crawford & Roberto V. Fiorentino (2005), The changing landscape of regional trade agreements, WTO Discussion Paper, No. 8, ISBN 9287033269, World Trade Organization (WTO), Geneva; Martin Roy, Juan Marchetti & Hoe Lim (2007). Services liberalization in the new generation of preferential trade agreements (PTAs): how much further than the GATS?. World Trade Review, 6(2), 155-192.

General Agreement on Trade in Services, Annex 1B to the Agreement Establishing the World Trade Organization, done at Marrakesh on 15 April 1994, UNTS No. 31874. The text is available in: WTO, The Results of the Uruguay Round of Multilateral Trade Negotiations: The Legal Texts (Cambridge, Cambridge University Press 2017), at 357.

WTO Members voluntarily enter commitments on market access (Article XVI), national treatment (XVII), and additional commitments (XVIII) in their GATS Schedules, which constitute treaty text, on the basis of their national preferences. Liberalization is attained in the multilateral trading system in accordance to these specific commitments. As long as WTO Members decide to open more services sectors to international competition from other WTO Members, more liberalization is achieved. Accordingly, there is a positive relation between the process of entering commitments and the liberalization of services.

of clearing and settlement services for the integrity of financial systems, and their regulatory evolution as of today.

Financial instruments' clearing and settlement services have been regulated by international trade for the first time in late nineties, when the GATS Annex in Financial Services entered into force. ¹⁷⁸ Since then, a lot has changed in terms of the services prominence in world economies' financial market infrastructure. In particular, the industry itself has been subject to numerous changes driven by the force of regulation across the globe. Regardless of the economic model followed by WTO Members and the underlying competition structures of clearing and settlement service suppliers, whether monopolistic, or oligopolistic, the interconnectedness of international finance cannot permit major operational discrepancies that can result in financial market disruptions, and potentially place the whole system's financial stability into jeopardy. Importantly, clearing and settlement services are traditionally tasked with addressing the risks associated with the trading of financial instruments, such as the failure of a counterparty to fulfill its part of the deal in a derivatives transaction or even the "loss" of a security due to its high exchangeability, being the "back-office" activity of trading securities. ¹⁷⁹ That said, clearing and settlement services have been part of the financial markets since late nineteenth century, 180 but their relevance today has been shaped due to the regulatory swift responding to the 2007-2009 global financial crisis.

In the aftermath of the crisis, and in accordance with the G-20 mandate, financial regulations that place the functioning of clearinghouses in the epicenter of over-the-counter (OTC) derivative markets were crafted. The new role attributed to clearinghouses pertains to requiring the *mandatory clearing* of certain types of OTC derivatives¹⁸¹ that can potentially have a systemic spillover effect in case one of the counterparties to the transaction goes bust.¹⁸² This regulatory change aspires to reduce the perils posed by derivative markets, while taking into consideration that additional costs levied to trading parties, by the posting of collateral.

_

The GATS Annex on Financial Services explicitly refers in its indicative list to clearing services in par. 5(a)(xiv): settlement and clearing services for financial assets, including securities, derivative products, and other negotiable instruments.

For general literature on financial instruments clearing and settlement services in the European Union see D. Turing, Clearing and Settlement, 2017, Bloomsbury.

For a historical narrative of clearinghouses see Neal L. Wolkoff and Jason B. Werner (2010), "History of Regulation of Clearing in the Securities and Futures Markets, and Its Impact on Competition, The," Rev. Banking & Fin. L. 30: 313.

Such as interest rate swaps, foreign exchange, and credit default swaps among others.

This regulatory trend can be identified in all major global economies, and its efficacy on the basis of the G-20 standards is measured by the Financial Stability Board (FSB) annually.

This regulatory trend is in sharp contrast to what used to occur, where financial institutions were free to choose whether they wanted to employ clearing services or proceed the transaction without. Accordingly, the whole business of clearing has developed since then, and interestingly, this study seeks to investigate if this regulatory swift has impinged on the liberalization of clearing services, traced in EIAs. The GATS commitments on clearing services are ubiquitous in the multilateral trading system. Nonetheless, they are not apt to capture regulatory evolution because they are not updated by WTO Members. This *Chapter* seeks to identify whether EIAs are better placed to encounter these regulatory challenges.

Investigating the commitments undertaken by WTO Members for clearing and settlement services in EIAs, leads to measuring the depth of their liberalization, while aiming to take a grasp of the underlying dynamics that are the driving forces of the observed integration model. What are the geographical trends that contribute to the liberalization of international clearing trade-flows, or, what type of restrictions in the integration of these services are placed in EIAs are some of the questions to be addressed. This *Chapter* is structured as follows: Section II, sets out the methodology of the study. Section III, sheds light on the descriptive statistics and observations drawn by the study to deploy a comprehensive analysis of the stakes involved. Section IV, adopts a line of argument with regards to the relationship between the regulation of financial services and the law of international trade based on the findings of the *Chapter*. Finally, Section V concludes.

2. METHODOLOGY

One of the overarching objectives of this contribution is by establishing a comprehensive typology of the commitments pertinent to *clearing and settlement* services in EIAs to measure the liberalization of financial market infrastructure services in the plurilateral trading system. Our analysis covers the 152 EIAs currently in force, which have been notified to the WTO up to September 2018 under Article V (Economic Integration) of the GATS, under Article XXIV (Territorial Application – Frontier Traffic – Customs Unions and Free-trade Areas) of the General Agreement on Tariffs and Trade (GATT-1994), and the Enabling Clause (Decision on Differential and More Favourable Treatment, Reciprocity and Fuller Participation on Developing Countries). The scope of this *Chapter* is limited to the

-

The WTO Regional Trade Agreements (RTAs) database has been used as main source to collect the data of this study. All EIAs that are reviewed here, alongside with the text of the agreements, the annexes and other related documents can be found in the linked database, https://rtais.wto.org/UI/PublicMaintainRTAHome.aspx.

agreements that the level of their integration utilizes the trade liberalizing toolkit provided by the GATS. Namely, deeply integrated economic unions are not examined because their inclusion would not add any value, as the tools employed to further integrate these markets (i) deviate from the traditional trade instruments and as a result cannot serve the purposes of this empirical study because they are not comparable, and (ii) represent a small fraction (12/152) of the number of agreements notified to the WTO. 184 The two main set of documents that this analysis is premised on are undoubtedly the *schedules of commitments*, and the *list of reservations* of the parties to the EIAs, which are usually in the form of annexes attached to the main agreement. 185 Nonetheless, in numerous occasions recourse to the agreements' chapters and side documents, such as protocols, communication letters, understandings, and other documents associated with the EIAs is necessary to obtain a holistic perspective of this study's subject matter.

Henceforth, since the nature of this inquiry is to measure the liberalization of clearing and settlement services in EIAs, it is essential to clarify the tools that are employed to that end. Traditionally, trade in services is supplied through the GATS four (4) modes of supply: namely, cross-border supply (mode 1), consumption abroad (mode 2), commercial presence (mode 3), and movement of persons (mode 4). When it comes to wholesale financial services, such as the ones of clearing and settlement, immediately mode 4 becomes redundant, because these types of services are provided by large financial institutions, rather than by individuals. Therefore, this study examines the liberalization of clearing and settlement services for *modes* 1, 2, and 3. Furthermore, same as in the multilateral trading system, in EIAs the liberalization of financial services is effectuated through undertaken commitments on *market access*, and

The 12 EIAs notified to the WTO that are not covered by this study are the following: EC (15) Enlargement, EC (25) Enlargement, EC (27) Enlargement, EC Treaty, EU (28) Enlargement, Eurasian Economic Union (EAEU), Eurasian Economic Union (EAEU) – Accession of Kyrgyz Republic, European Economic Area (EEA), European Free Trade Association (EFTA), Southern Common Market (MERCOSUR), Caribbean Community and Common Market (CARICOM).

For all the undertaken commitments/reservation on clearing and settlement services in Economic Integration Agreements, see Table 6: Clearing & Settlement Commitments in Economic Integration Agreements at the end of this volume.

¹⁸⁶ It is well-documented that the evolution of technological means that financial services are supplied transnationally has created a legal problem in the interpretation of undertaken commitments for *modes 1* (cross-border supply) and 2 (consumption abroad), either under the multilateral trading system, through the GATS schedules, or under EIAs. For analyses on this issue, and the possible problematic implications see WTO, Council for Trade in Services, Committee on Trade in Financial Services, S/C/W/312, S/FIN/W/73, 3 February 2010, par. 36, p. 10; Judson O. Berkey, A Framework Agreement for Electronic Commerce Regulation under the GATS, 1-2 (Institute for International Finance, 2001); George A. Papaconstantinou (2019), The GATS and Financial Regulation: Time to Clear-house?, World Trade Review, 1-23, available https://doi.org/10.1017/S1474745619000181, pages 7-10.

national treatment, which are contingent upon specific mode of supply. Thus, the modes of supply and the entered commitments on market access and national treatment are the existing variables that define the level of liberalization of clearing and settlement services in EIAs.

For the sake of clarity, it shall be underlined that while evaluating the level of liberalization of clearing and settlement services in EIAs on the basis of the abovementioned landmarks (modes of supply, and commitments), challenges emerge due to the different approach that countries adopt in scheduling their commitments. 187 Namely, the three more frequently met methods are: on the one hand (i) positive lists, which mirror the scheduling approach put forward in the GATS. In specific, countries in their schedules of commitments include all the services sectors and subsectors, and attached to them they inscribe whether they undertake particular commitments for market access and national treatment for the particular modes of supply; on the other hand (ii) negative lists follow the approach used for the first time in North Atlantic Free Trade Agreement ("NAFTA"). The negative list approach instead of schedules of commitments, has list of reservations which strictly refer to the measures that are not subject to full commitment (complete liberalization). Thirdly, (iii) hybrid lists have emerged as a model that combines characteristics of the two latter. For instance, hybrid lists use positive list for cross-border supply and negative lists for establishment. Traditionally, negative listing is closer than its positive counterpart to the objective of trade liberalization because it forces states to scrutinize their regulatory frameworks and check its compatibility with trade disciplines, before concluding their trade agreements, where they have to include these measures in their list of reservations in concreto. The challenges met in the process of collecting the empirics of this study lie with the inherent differences of the two approaches. To produce a comprehensive dataset that measures the level of liberalization of EIAs it is necessary to first compile and structure the data in a uniform fashion. To that end, in the process of compiling the data from EIAs with negative lists, I translated them into positive commitments so that the contribution can be more thorough and provide for a clearer picture of the overall EIA's *status quo*.

-

For thorough analyses with regards to the different approaches that parties to EIA use to opening their services sectors see Martin Roy, Juan Marchetti, and Hoe Lim, 2008. "The Race Towards Preferential Trade Agreements in Services: How Much is Really Achieved?," in Panizzon, Pohl, and Sauve, (eds.), *The GATS and International Regulation of Trade in Services*. New York: Cambridge University Press; Cf. Juan A. Marchetti, 2011. "Do PTAs Actually Increase Parties' Services Trade?", in Bagwell, and Mavroidis (eds.), Preferential Trade Agreements: A Law and Economics Analysis. Cambridge University Press, pp. 214-220.

The question that next comes to mind relates to the methodology adopted to gauge the "depth" of the just-described liberalization. For starters, WTO Members have undertaken commitments in their GATS schedules for clearing and settlement services. These commitments naturally mirror the GATS asymmetric geometry, and are different for each and every WTO Member. Notably, this *Chapter* investigates the clearing and settlement services' commitments of parties to EIAs. Once the commitments of EIA parties are mapped out, they are juxtaposed to the ones entered by the same countries in their GATS schedules. The outcome of the juxtaposition between the countries' commitments in EIAs, and their commitments under the GATS defines the liberalization depth. More specifically, there are 4 possible scenarios in that score: first, if country's x undertaken commitments in a EIA fall below the GATS threshold, then this is a GATS-minus. However, due to the existence of the GATS Article II on MFN, this category constitutes nothing but a legal fiction as long as the conditions of Article II of the GATS are fulfilled; second, if country x has entered in a EIA the exact same commitments, as the ones under the GATS, then we have a GATS liberalization depth; third, if the commitments of country x in a EIA go beyond the ones in the GATS, then this constitutes a *GATS(+)*.¹⁸⁸

This *Chapter* aims first to empirically assess the liberalization levels of clearing and settlement services in EIAs, and second to explore the underlying dynamics and trends that spearhead the surveyed liberalization. For instance, an essential query that this study seeks to address relates to which geographical regions put forward the liberalization agenda for these financial market infrastructure services and if possible, interpret the reasons behind. The recent history of the GATS has taught us that it was the US, and its industry, alongside with the European Communities, at the time that aspired and managed to introduce an international rulebook for the trade in financial services. Has something changed in the course of the next two decades, or are the same regions the net exporters of financial services? The case study of clearing and settlement services is going to be a helpful guide in this respect. Next, other trends

-

For the sake of completeness, *GATS(+)*, as a category, can be further narrowed down to (i) *GATS-plus* when the undertaken commitments go beyond the entered commitments in the relevant GATS schedules, and (ii) *GATS-extra* if country *x* has not undertaken any commitments in the GATS, but it does in the context of the EIA. For the purposes of some figures and tables of this *Chapter*, those two categories are merged under the *GATS(+)* term.

Admittedly, it was American Express that put forward the agenda of incorporating financial services under the negotiations of the WTO. For analyses on the dynamics that led to the inclusion of financial services in the GATS, see Juan A. Marchetti and Petros C. Mavroidis, "The Genesis of the GATS (General Agreement on Trade in Services)," *European Journal of International Law* 22, no. 3 (August 1, 2011): 689–721. See also, Sydney J. Key, *The Doha Round and financial services negotiations*. American Enterprise Institute, 2003.

in terms of the specific services sector are discerned based on the empirics, such as the negative or positive listing and which is more prone to furnish liberalization. Additionally, new regulatory frameworks for clearinghouses across the globe, in the aftermath of the crisis, started being enacted around 2010. How does this regulatory trend blend in the liberalization of clearing services in EIAs? This study will try to give an answer to that as well.

After having contextualized the features of this *Chapter* and explained the methodological steps that the analysis undertakes, it is time to venture into the empirics of this study in order to engage in the subject matter and put forward the arguments of this contribution. First, the scope of the study becomes evident and furthermore, the trends that have been identified in the EIAs' commitments on clearing and settlement services are discussed.

3. EMPIRICAL ANALYSIS

3.1 FINDINGS

Before delving into the more granular aspects of this *Chapter*, it is essential to introduce its precise scope, and its main features. To start with, as mentioned above, this study covers the EIAs, included in *Table 1*, which regulate securities' clearing and settlement services, and at least one party has made commitments. ¹⁹⁰ Additionally, the timeframes of their conclusions are comprised in the next two columns so that the chronological trends in terms of the scheduling approaches (either through positive, negative or hybrid lists), and liberalization levels that exceed the GATS state of play can be initially drawn, before we further shed light on them in the course of the analysis. Out of the 102 EIAs, 49 use schedules of commitments (positive lists) and 48 lists of reservations (negative lists), while 3 are hybrids. The fifth column observes whether at least one party to the EIA in question enters commitments on clearing and settlement services that are more trade liberalizing than the ones it has undertaken in the multilateral trading system, under the GATS. Interestingly, 64 EIAs extend higher commitments than the ones under the GATS regime. The specifics of this table are examined *infra*.

_

¹⁹⁰ In subsection 3 infra, the 38 preferential trade agreements that either do not regulate trade in financial services or do not furnish specific set of commitments for clearing and settlement services are examined. Particular behavioral patterns and geographical trends are discerned.

Table 1: EIAs under review

				EIA's
				commitments on
		WTO		clearing & settlement going
	Entry	notificatio	Positive or	beyond the
EIA	into force	n	Negative list?	GATS?
ASEAN - Australia -	Jan. 2010	Apr. 2010	Positive list	No
New Zealand				
ASEAN - China	Jul. 2007	Jun. 2008	Positive list	No
ASEAN - India	Jul. 2015	Aug. 2015	Positive list	No
ASEAN - Korea,	Oct. 2010	Jul. 2010	Positive list	No
Republic of				
Australia - Chile	Mar. 2009	Mar. 2009	Negative list	Yes
Australia - China	Dec. 2015	Jan. 2016	Negative list	Yes
Australia - New	Jan. 1989	Nov. 1995	Negative list	Yes
Zealand				
Brunei Darussalam -	Jul. 2008	Jul. 2008	Positive list	Yes
Japan				
Canada - Colombia	Aug. 2011	Oct. 2011	Negative list	Yes
Canada - Honduras	Oct. 2014	Feb. 2015	Negative list	Yes
Canada - Panama	Apr. 2013	Apr. 2013	Negative list	Yes
Canada - Peru	Aug. 2009	Jul. 2009	Negative list	Yes
Canada - Rep. of	Jan. 2015	Jan. 2015	Negative list	Yes
Korea				
Chile - Japan	Sep. 2007	Aug. 2007	Positive list	Yes
Chile - Thailand	Nov. 2015	Sep. 2017	Positive list	Yes
China - Georgia	Jan. 2018	Apr. 2018	Positive list	Yes
China - Korea,	Dec. 2015	Mar. 2016	Positive list	No
Republic of				
China - New Zealand	Oct. 2008	Apr. 2009	Positive list	No
China - Singapore	Jan. 2009	Mar. 2009	Positive list	No
Costa Rica -	Aug. 2016	Oct. 2016	Negative list	Yes
Colombia				
Dominican Republic	Mar. 2006	Mar. 2006	Negative list	Yes
- Central America -				
United States Free				
Trade Agreement				
(CAFTADR)	A 2014	NI 2014	D	V
EFTA - Central	Aug. 2014	Nov. 2014	Positive list	Yes
America (Costa Rica				
and Panama)	Jul 2011	Com 2011	Dogitive list	Vac
EFTA - Colombia	Jul. 2011	Sep. 2011	Positive list	Yes

EIA	Entry into force	WTO notificatio n	Positive or Negative list?	EIA's commitments on clearing & settlement going beyond the GATS?
EFTA-Georgia	Sep. 2017	Aug. 2017	Positive list	Yes
EFTA - Hong Kong,	Oct. 2012	Sep. 2012	Negative list	Yes
China				
EFTA - Korea,	Sep. 2006	Aug. 2006	Positive list	Yes
Republic of				
EFTA - Mexico	Jul. 2001	Jul. 2001	Negative list	Yes
EFTA - Singapore	Jan. 2003	Jan. 2003	Positive list	No
EFTA-Ukraine	Jun. 2012	Jun. 2012	Positive list	Yes
EU - Canada	Sep. 2017	Sep. 2017	Negative list	No
EU - CARIFORUM	Dec. 2008	Oct. 2008	Positive/Negative	No
EU - Central America	Aug. 2013	Feb. 2013	Negative list	Yes
EU - Chile	Mar. 2005	Oct. 2005	Positive list	Yes
EU - Colombia and	Mar. 2013	Feb. 2013	Negative list	Yes
Peru				
EU - Colombia, Peru	Jan. 2017	Mar. 2017	Positive/Negative	Yes
- Accession of				
Equador	G 2014	T 1 2014	TT 1 '1	NT
EU - Georgia	Sep. 2014	Jul. 2014	Hybrid	No
EU - Korea, Republic of	Jul. 2011	Jul. 2011	Positive list	No
EU - Mexico	Oct. 2002	Jun. 2002	Negative list	Yes
EU - Moldova,	Sep. 2014	Jun. 2014	Hybrid	No
Republic of	Sep. 2014	Juli. 2014	Tiyond	110
EU - Ukraine	Apr. 2014	Jul. 2014	Hybrid	No
Gulf Cooperation	Sep. 2013	Jun. 2015	Positive list	Yes
Council (GCC) -	Sep. 2013	Juli. 2015	1 ositive iist	
Singapore				
Hong Kong, China -	Oct. 2014	Oct. 2014	Positive list	Yes
Chile				
Hong Kong, China -	Oct. 2017	Dec. 2017	Positive list	No
Macao, China				
Hong Kong, China -	Jan. 2011	Jan. 2011	Negative list	No
New Zealand				
Iceland-China	Jul. 2014	Oct. 2014	Positive list	No
India - Japan	Aug. 2011	Sep. 2011	Positive list	Yes
India - Malaysia	Jul. 2011	Sep. 2011	Positive list	No
India - Singapore	Aug. 2005	May-07	Positive list	No
Japan - Australia	Jan. 2015	Jan. 2015	Negative list	Yes
Japan - Indonesia	Jul. 2008	Jun. 2008	Positive list	Yes
Japan - Malaysia	Jul. 2006	Jul. 2006	Positive list	Yes
Japan-Mexico	Apr. 2005	Mar. 2005	Negative list	No
Japan - Mongolia	Jun. 2016	Jun. 2016	Positive list	No

EIA	Entry into force	WTO notificatio n	Positive or Negative list?	EIA's commitments on clearing & settlement going beyond the GATS?
Japan - Peru	Mar. 2012	Feb. 2012	Negative list	Yes
Japan - Philippines	Dec. 2008	Dec. 2008	Positive list	Yes
Japan - Singapore	Nov. 2002	Nov. 2002	Positive list	No
Japan - Switzerland	Sep. 2009	Sep. 2009	Negative list	Yes
Japan - Thailand	Nov. 2007	Oct. 2007	Positive list	Yes
Japan - Viet Nam	Oct. 2009	Oct. 2009	Positive list	Yes
Jordan - Singapore	Aug. 2005	Jul. 2006	Positive list	No
Korea, Republic of - Australia	Dec. 2014	Dec. 2014	Negative list	Yes
Korea, Republic of - India	Jan. 2010	Jul. 2010	Positive list	No
Korea, Republic of - Singapore	Mar. 2006	Feb. 2006	Positive list	No
Korea, Republic of - US	Mar. 2012	Mar. 2012	Negative list	Yes
Korea, Republic of - Viet Nam	Dec. 2015	Mar. 2016	Positive list	No
Malaysia - Australia	Jan. 2013	May. 2013	Positive list	No
Mexico - Panama	Jul. 2015	Jun. 2016	Negative list	Yes
New Zealand - Chinese Taipei	Dec. 2013	Nov. 2013	Negative list	Yes
New Zealand - Malaysia	Aug. 2010	Feb. 2012	Positive list	No
New Zealand - Singapore	Jan. 2001	Sep. 2001	Positive list	No
Nicaragua - Chinese Taipei	Jan. 2008	Jul. 2009	Negative list	Yes
North American Free Trade Agreement (NAFTA)	Jan. 1994	Mar. 1995	Negative list	Yes
Pacific -Alliance	May-16	Nov. 2016	Negative list	Yes
Pakistan - China	Oct. 2009	May. 2010	Positive list	No
Pakistan - Malaysia	Jan. 2008	Feb. 2008	Positive list	No
Panama - Chinese Taipei	Jan. 2004	Jul. 2009	Negative list	Yes
Panama - Costa Rica (Panama - Central America)	Nov. 2008	Apr. 2009	Negative list	Yes
Panama - El Salvador (Panama - Central America)	Apr. 2003	Feb. 2005	Negative list	Yes

EIA	Entry into force	WTO notificatio n	Positive or Negative list?	EIA's commitments on clearing & settlement going beyond the GATS?
Panama - Guatemala (Panama - Central America)	Jun. 2009	Apr. 2013	Negative list	Yes
Panama - Honduras (Panama - Central America)	Jan. 2009	Dec. 2009	Negative list	Yes
Panama - Nicaragua (Panama - Central America)	Nov. 2009	Feb. 2013	Negative list	Yes
Panama-Peru	May. 2012	Apr. 2012	Negative list	Yes
Panama - Singapore	Jul. 2006	Apr. 2007	Negative list	Yes
Peru - China	Mar. 2010	Mar. 2010	Positive list	Yes
Peru - Korea, Republic of	Aug. 2011	Aug. 2011	Negative list	Yes
Peru - Mexico	Feb. 2012	Feb. 2012	Negative list	Yes
Peru - Singapore	Aug. 2009	Jul. 2009	Positive list	No
Singapore - Australia	Jul. 2003	Sep. 2003	Negative list	Yes
Singapore - Chinese Taipei	Apr. 2014	Apr. 2014	Positive list	No
Switzerland - China	Jul. 2014	Jun. 2014	Positive list	No
Thailand - Australia	Jan. 2005	Dec. 2004	Positive list	Yes
Ukraine - Montenegro	Jan. 2013	Apr. 2013	Positive list	No
US - Australia	Jan. 2005	Dec. 2004	Negative list	Yes
US - Bahrain	Aug. 2006	Sep. 2006	Negative list	Yes
US - Chile	Jan. 2004	Dec. 2003	Negative list	Yes
US - Colombia	May. 2012	May. 2012	Negative list	Yes
US - Jordan	Dec. 2001	Jan. 2002	Positive list	No
US - Morocco	Jan. 2006	Dec. 2005	Negative list	Yes
US - Oman	Jan. 2009	Jan. 2009	Negative list	No
US - Panama	Oct. 2012	Oct. 2012	Negative list	Yes
US - Peru	Feb. 2009	Feb. 2009	Negative list	Yes
US-Singapore	Jan. 2004	Dec. 2003	Negative list	No

Source: Own analysis, WTO RTA database

3.2 COMMENTS ON EIAS COMMITMENTS: STABILITY AND COMPETITION CONSIDERATIONS

This subsection investigates the *comments* that parties to EIAs have attached to their commitments on financial instruments' clearing and settlement services. The importance of this exercise principally lies in discovering different countries perceptions/intentions over the underlying services on the one hand, and discerning potential trends on the other. Regardless the major differences between the two financial market infrastructure services sectors, due to their CPC classification they are always examined hand in hand in all plurilateral trade agreements, same as in the GATS. Nonetheless, such categorization posits complexity to trade negotiators charged with bargaining over trade in financial services issues because it links two significantly different industries under the same roof. We contend that the silo that exists between the trade and finance teams of most countries administrations is to blame for the lack of convergence of the two disciplines. This dichotomy between trade and finance administrations is exemplified strikingly by the content of PTAs, whereby no reflections of the financial industry's evolution in terms of commitments or specific provisions are recorded. Below, Table 2 sheds light on the comments pertinent to the subject matter of the study and later we discuss the way these comments explain the state of play of international clearing and settlement trade-flows, as at the same time we attempt to interpret the relation between trade commitments and international finance.

Table 2: EIA comments on commitments in clearing and settlement services

Country	EIA comments on commitments limiting liberalization in Clearing & Settlement services	In EIAs with
Singapore	Market Access & National Treatment: (Mode 1):	AESEAN-
	Unbound, except for the provision of settlement and	Australia-
	clearing services for financial assets which are listed on	New Zealand,
	overseas exchanges only. (Mode 3): These measures are	,
	also limitations on national treatment. Settlement and	AESEAN-China,
	clearing services for exchange traded securities and	AESEAN-India,
	financial futures can only be provided by Central	ŕ
	Depository (Pte) Limited and Singapore Exchange	AESEAN-Korea,
	Derivatives Clearing Ltd (SGX-DT) respectively. Only	
	one clearing house established under the Banking Act	

Country	EIA comments on commitments limiting liberalization in Clearing & Settlement services	In EIAs with
	may provide clearing services for Singapore dollar cheques and interbank fund transfer.	China, EFTA, GCC,
		India, Japan, Jordan,
		Korea, New-
		Zealand, Panama,
		Peru, Chinese
		Taipei and US
Singapore	Market Access Reservation: Singapore reserves the right to adopt or maintain any measure affecting the supply of clearing and settlement services for exchange traded securities, financial futures and interbank transfers. National Treatment & Market Access Reservation: Singapore reserves the right to adopt or maintain any measure in the form of subsidies or grants provided by Singapore in connection with the supply of any financial service involving what Singapore deems as systemically important financial markets infrastructure, including: (a) Exchanges; (b) Central Depositories; (c) Repositories; (d) Clearing and Settlement facilities; and (e) Market operators.	Australia
Cambodia	Market Access: (Mode 3): Unbound until the Government of Cambodia determines what types of entities can conduct these services, the related laws and regulation are established, and such business is authorized by the government or other relevant designated authority.	AESEAN-India and AESEAN- Korea

Country	EIA comments on commitments limiting liberalization in Clearing & Settlement services	In EIAs with
Jordan	Market Access: (Mode 3): Access restricted to the Depository Center at the Amman Bourse for securities, and to the Central Bank of Jordan for all other financial instruments.	Singapore and US
Montenegr o	Market Access: (Mode 3): This type of services may be provided by Central Depository of Securities only	Ukraine
Bahrain	Market Access: (Mode 1): Unbound, except for cross-listed equities that may be cleared on exchanges offering reciprocal privileges and that meet Bahrain information requirements. (Mode 3): Unbound. Bahraini Dinar (BD) clearing must be through the Central Bank of Bahrain (CBB). BSE listed equities & securities must be cleared through the BSE.	GCC-Singapore
Saudi Arabia	Market Access & National Treatment: (Modes 2 and 3): Unbound for all domestic settlement and clearing services provided exclusively by Saudi Arabian Monetary Agency (SAMA) under 'j.' This also limits national treatment.	GCC-Singapore
Romania	Market Access: (Mode 1) Unbound for financial leasing, for trading of money market instruments, foreign exchange, derivative products, exchange rate and interest rate instruments, transferable securities and other negotiable instruments and financial assets, for participation in issues of all kinds of securities, for asset management and for settlement and clearing services for financial assets. Payments and money transmission services are allowed only through a resident bank.	EU-Ukraine, EU- Moldova, EU- Korea, EU- Georgia, EU-Colombia- Peru- Ecuador, EUColombia-

Country	EIA comments on commitments limiting liberalization in Clearing & Settlement services	In EIAs with
		Peru, EUCentral
		America and EU-
		CARIFORUM
Croatia	Market Access: (Mode 3) None, except for settlement	EU-Ukraine and
	and clearing services where the Central Depositary Agency (CDA) is the sole supplier in Croatia. Access to the services of the CDA will be granted to non-residents on a non-discriminatory basis.	EU-Colombia- PeruEcuador
Italy	Market Access: (Mode 3): Clearing and settlement of securities may be conducted only by the official clearing system. A company authorised by the Bank of Italy in agreement with Consob could be entrusted with the activity of clearing, up to the final settlement of securities.	EU-Mexico
Italy	Market Access: (Mode 3): Clearing services including the phase of final settlement may be conducted only by entities duly authorised and supervised by the Bank of Italy in agreement with Consob.	EU-Chile
Honduras	Market Access: (Mode 3): Depositories for the custody, compensation and liquidation of shares in Honduras must be constituted as public corporations.	CAFTA-DR
Dominican Republic	Market Access: (Mode 3): The following entities must be incorporated under the laws of the Dominican Republic: (a) stock exchanges, (b) commodities exchanges, (c) brokers, (d) dealers, (e) clearing houses, (f) centralized depositories of securities, (g) investment fund managers, and (h) securities underwriters.	CAFTA-DR

Country	EIA comments on commitments limiting liberalization in Clearing & Settlement services	In EIAs with
Chile	Market Access: (Mode 3): Clearing houses for futures	Japan, Thailand,
	contracts and options on securities must be constituted in Chile as corporations for that sole purpose and with an authorisation from the SVS. They may only be	EU, Hong-Kong and
	constituted by stock exchanges and their stockbrokers.	Pacific Alliance
Chile	Market Access: (Mode 3): Clearing houses of futures,	Australia and US
	options and other contracts of similar nature that the	
	Superintendencia de Valores y Seguros may authorize,	
	must be established as special purpose corporations	
	(sociedades anónimas especiales) under Chilean law.	
	Only stock exchanges established in Chile and stock	
	brokers who are members of those exchanges can be	
	shareholders of clearing houses. Clearing houses of	
	futures and options on cattle and agricultural	
	commodities must be established as special purpose	
	corporations (sociedades anónimas especiales) under	
	Chilean law.	
Korea	Market Access: Only the Korea Securities Depository	Australia and US
	and the Korea Exchange may perform liquidation and	
	settlement of securities and derivatives listed or traded	
	on the Korea Exchange.	

Source: Own analysis, WTO RTA database

The comments attached to the commitments on financial assets' clearing and settlement services can serve as a good indicator of how the trade negotiating teams of some states understand this sector of high relevance for the integrity of international financial systems. In addition, while identifying some patterns in the entering commitments process in EIAs, the study indicates that the existing *silo* between financial regulators and trade negotiators does not facilitate their much-needed interaction. Namely, the absence of this interaction is at odds with the liberalization of financial services and the promotion of international competition. Let us

first review the prevalent trends, before we commence the discussion on their implications in the transnational regulatory framework.

First, the common denominator among Singapore, in all the EIAs it has concluded, alongside Korea, in its preferential agreements with Australia and the US, Bahrain and Saudi Arabia, in their commitments under GCC-Singapore, is that they all limit market access of clearing and settlement services for domestically listed securities. 191 The clear-cut rationale behind this barrier to trade is no other than financial stability considerations. Financial stability constitutes an overarching priority for regulators. Especially in the wake of the 2008 global financial crisis, States have ostensibly payed lots of attention to restructuring their regulatory architecture in ways that can potentially address perilous scenarios. The services provided by clearinghouses for OTC derivatives have been at the forefront of financial rulebooks' revisions, to mitigate the systemic risks involved in these transactions. Nonetheless, financial stability considerations are not only met in the context of financial regulatory standards and supervisory boards' list of priorities, but they are additionally encountered in the GATS Annex in Financial Services, ¹⁹² and in most of the concluded EIAs. ¹⁹³ The prudential exemption embedded in trade agreements is designed to offer to regulators all the regulatory space they need to address situations of emerging financial instability, while filtering whether the corresponding measures' are fit for the purpose, without providing for unnecessary trade barriers. The next paragraph attempts to appraise to what extent the limitation met at the abovementioned EIAs' commitments can be justified under financial stability considerations, while disregarding trade disciplines since States have all the leverage while entering their own commitments in services, following the model developed in the GATS era.

The recent crisis illustrated the interconnectedness of national financial markets, which was evidenced in the proliferation effects of securitized financial instruments in derivative

For instance, Korea in its EIA with the US phrases that: only the Korea Securities Depository and the Korea Exchange may perform liquidation and settlement of securities and derivatives listed or traded on the Korea Exchange. Or, Singapore for the provision of cross-border (mode 1) services always mandates that the services are: unbound except for the provision of settlement and clearing services for financial assets which are listed on overseas exchanges only.

¹⁹² For thorough analysis of the role of the GATS prudential carve-out ("PCO") in respect of filtering the compliance of the European Union regulatory framework for clearinghouses, see above in *Chapter III*.

For an empirical approach and a comprehensive analysis of the role of the PCO in EIAs, and its negotiating history in the GATS see Carlo Maria Cantore, *The Prudential Carve-Out for Financial Services: Rationale and Practice in the GATS and Preferential Trade Agreements*, Cambridge University Press, 2018; Chapter 4, p. 102-167.

markets around the world. 194 Clearing and settlement are the so-called "back-office" services which are destined to support the trading of financial instruments. The whole business of financial market infrastructure is international in nature because it mirrors the way financial market transactions occur in parallel to the operations of multinational financial institutions. Additionally, it shall be clarified that especially after the regulatory overhaul, based on the G-20 mandate, international competition for the clearing of OTC derivatives is omnipresent. However, foreign competition of clearing services is contingent upon equivalence or substituted compliance regimes, 195 which test whether the rules of other States and the supervision and enforcement of clearinghouses are on the same page as theirs. Hence, one observation that can be made at the outset about the limitation of clearing and settlement of home listed securities from foreign entities is that it does not encourage competition in the respective sectors. The conundrum in striking the right balance between financial stability and competition in financial services is not yet resolved, 196 and accordingly there is no established path for States to steer their national regulatory policies.

Additionally, these services sectors have been traditionally subject to monopolistic competition structures, and only within the last 20 years competition has started emerging in certain States. Another observation to be made is that the countries that decide to have their home listed securities cleared and settled within their own jurisdiction do it on the premise that the integrity of their capital markets would not be affected by possible malfunction of a foreign financial institution. This rationale seems absolutely legitimate and in line with the prudential carve-out provision embedded not only in the GATS, but also in most of the EIAs examined here. Nonetheless, financial instruments' clearing and settlement from foreign service suppliers, which currently becomes increasingly relevant does not seem to pose any systemic

For a great narrative of the unfolding of the crisis, see Lewis, Michael. *The Big Short: Inside the Doomsday Machine*. WW Norton & Company, 2015. Cf. Robert J. Shiller (2012). The subprime solution: How today's global financial crisis happened, and what to do about it. Princeton University Press; James Crotty (2009). Structural causes of the global financial crisis: a critical assessment of the 'new financial architecture'. Cambridge journal of economics, 33(4), 563-580; Stijn Claessens, Luc Laeven, Denis Igan, & Giovanni Dell'Ariccia (2010). Lessons and policy implications from the global financial crisis (No. 10-44). International Monetary Fund.

¹⁹⁵ For an analysis of the EU/US financial regimes see Yesha Yadav & Dermot Turing, (2016). The Extraterritorial Regulation of Clearinghouses. *Journal of Financial Regulation*, 2(1), 21-55. For the interaction between financial regulation and WTO law, see George A. Papaconstantinou (2019), The GATS and Financial Regulation: Time to Clear-house? *World Trade Review*, pages 1-23.

See, for example, contributions in economics and law literature addressing the intense relation between financial stability and competition, Vives, Xavier. "Competition and stability in banking: The role of Regulation and Competition Policy", Princeton University Press, 2016; Bart De Meester, *Liberalization of Trade in Banking Services: An International and European Perspective*. Cambridge University Press, 2014, respectively.

stability problem, as long as the institutions themselves are robust and well managed. The shift to international competition on the relevant financial market infrastructure services, such as clearing and settlement, is gradual.¹⁹⁷ Nonetheless, liberalization in the sector does not seem to pose any risk for the integrity of financial markets.¹⁹⁸

Moreover, it is worth examining one of the reservations that Singapore listed in its EIA with Australia, which was signed and entered to force in 2003, because it brings into the spotlight the discourse between competition and stability in financial services: Singapore reserves the right to adopt or maintain any measure in the form of subsidies or grants provided by Singapore in connection with the supply of any financial service involving what Singapore deems as systemically important financial markets infrastructure, including: (a) Exchanges; (b) Central Depositories; (c) Repositories; (d) Clearing and Settlement facilities; and (e) Market operators. This national treatment and market access reservation circumscribes possible subsidies measures destined to systemically important financial institutions ("SIFIs"). The reservation thereto seems to be prophetic in a number of ways. At first sight, it should be explored whether the potential provision of subsidies to SIFIs in the absence of the national treatment discipline would give rise to any MFN issues. The answer is heavily relies on whether the SIFIs would be from Singapore or not. In the former case, no MFN issue seems to arise while in the latter an assessment of the requirements of the MFN provision in the respective EIA would be warranted. Further, this reservation captures what happened in the banking sectors of Europe and the US, as a response to the 2008 crisis vicious cycle when banks had to be rescued with public money (taxpayers' contributions). These regulatory options are not prima facie consistent with the rules of international economic law and domestic EU competition law, 199 and thus, this reservation explicitly provides for the necessary latitude to Singaporean authorities. Furthermore, it resonates the systemic importance of financial market infrastructure, something that today more than ever is true for the functioning of clearinghouses and their international trade-flows.

.

For example the U.S. Intercontinental group (ICE) started operating a clearing house in Europe in 2014, see Philip Stafford, 2014 https://www.ft.com/content/09a08298-c3f6-11e3-870b-00144feabdc0.

However, it should be clarified that even if liberalization, in the sense of international trade flows, does not pose any perils to financial systems, problems could potentially arise due to the way industries evolve and the way regulatory frameworks adapt (or they do not). Examples pertinent to clearing are the absence both in the U.S. and in the EU of resolution mechanisms of central counterparties (also called derivatives clearing organizations ("DCOs") in the other side of the water).

For a contribution that examines the role of injecting capital into the banking sector of the EU and the law of the WTO, see Bart De Meester (2010), "The Global Financial Crisis and Government Support for Banks: What Role for the Gats?," *Journal of International Economic Law* 13, no. 1, pages 27–63.

In the aftermath of the 2008 crisis, no WTO law litigation arose with regards to the States' support to the banking industry. Nevertheless, one may wonder to what degree did these bailout practices, both in the EU and the U.S., distort competition in relevant markets, encourage good practices, and promote national champions. The discussion over banks' bailouts exceeds the scope of this study, but it suffices to say that the reasons that lead to this course of action involved the consideration of market failures of international financial institutions could result in negative externalities for domestic financial systems, in addition to their prominence in buying and holding sovereign debt. In the same vein, what is special about Singapore's reservation is that it caters for a treaty provision in a trade agreement that reflects on the considerations of the financial industry and the state itself, while the majority of WTO Members when concluding trade agreements tend to overlook financial services' intricacies. In particular, this reservation does not solely rely on the existence of the prudential carve-out for rainy days, but rather represents a well-thought expression of domestic protection from outside judicial scrutiny in the case of turmoil in financial market infrastructure. Thus, Singapore in this reservation sets a good precedent on meaningful considerations of financial services included in Economic Integration Agreements, regardless the possible anticompetitive effects of such provision.

Not surprisingly, it is impossible to foresee all the potential competition and stability evolutions of the financial services industry. Nonetheless states should at least strive for explaining and communicating to their trade delegations all the issues of relevance for international trade and accordingly support them in the challenging task of liberalizing these markets through international agreements. Therefore, the Singaporean reservation at issue, although potentially trade-restrictive, constitutes a great example of interaction between the trade and finance teams of its government and attempts to strike a fair balance between competition and stability in an international trade agreement.

3.3 EIAS NOT REGULATING TRADE IN SECURITIES' CLEARING AND SETTLEMENT SERVICES AND INTERNATIONAL FINANCE

The rationale of the forthcoming analysis is to elucidate which are the EIAs that do not promulgate (i) the liberalization of financial services, and (ii) explore the underlying reasons behind. To address this question a review of the EIAs legal texts, and political economy considerations is required. The clearing and settlement of securities is a part of the broader realm of financial services, and that is why this study is necessary before we delve into their

specific commitments undertaken for this services sector. In terms of sheer numbers, out of the *152* preferential trade agreements notified to the WTO, as of 24th May 2018, *37* either do not capture trade in financial services at all, or even if they do, their commitments are set out *in abstracto*, either in the form of future rounds of negotiations or in vague or weak commitments that do not even rise to the WTO threshold. This exercise can serve as a useful guide to shed light on the parts of the world that do not seem to be eager proponents of financial services integration, and to provide for the explanations why, while illuminating on some observed patterns on the basis of the collected data. Additionally, trade agreements are not only about the promotion of economic interests, but also political considerations and zones of influence play a major role in their conclusion. First, *Table 3* records the 37 EIAs that are observed not to be financial services liberalization proponents with the legal justification traced in the content of these trade treaties, and then an analysis that underscores and elaborates on the most important aspects is deployed.

Table 3: EIAs excluding financial services

EIA	Entry into force	Provisions that exclude financial services from the scope of the EIA
Canada - Chile	05-Jul-97	Pursuant to Art. G-01 (2) and H-01 (2) (a) the Agreement does not cover trade in financial services for neither investment purposes nor cross-border supply, respectively.
Chile - China	01-Aug-10	Pursuant to Art. 2 (a) of the Supplementary Agreement on Trade in Services, financial services are not covered by the scope of the Free Trade Agreement between Chile and China.
Chile - Colombia	08-May	Pursuant to Art. 9.1 (4) and 10.1 (4) (a) the Agreement does not cover financial services for neither investment nor cross-border supply, respectively.
Chile - Costa Rica	15-Feb-02	Pursuant to Art. 11.02 (3) (d) the Agreement, financial services are not covered by the scope of the Free Trade Agreement.
Chile - El Salvador	01-Jun-02	Pursuant to Art. 11.02 (3) (d) the Agreement, financial services are not covered by the scope of the Free Trade Agreement.

EIA	Entry into force	Provisions that exclude financial services from the scope of the EIA
Chile - Guatemala	23-Mar-10	Pursuant to Art. 11.02 (3) (d) the Agreement, financial services are not covered by the scope of the Free Trade Agreement.
Chile - Honduras	19-Jul-08	Pursuant to Art. 11.02 (3) (d) the Agreement, financial services are not covered by the scope of the Free Trade Agreement.
Chile - Mexico	01-Aug-99	Pursuant to Art. 9-02 (3) and 10-02 (3) (a) the Agreement does not cover financial services for neither investment nor cross-border supply, respectively.
Chile - Nicaragua	19-Oct	Pursuant to Art. 11.02 (3) (d) the Agreement, financial services are not covered by the scope of the Free Trade Agreement.
China - Costa Rica	01-Aug-11	Pursuant to Art. 91 (3) (e) the Agreement does not cover financial services.
China- Hong Kong, China	29-Jun-03	This Closer Economic Partnership although regulates financial services is not comprehensive and its trade disciplines are not fullydeveloped. When it comes to MA it is absent from the Agreement text and it is not implicitly existent in neither commercial presence (only NT & MFN) nor cross-border supply which is 3 lines about further liberalization discussions.
China - Macao, China	13-Oct-03	This Closer Economic Partnership although regulates financial services is not comprehensive and its trade disciplines are not fullydeveloped. When it comes to MA it is absent from the Agreement text and it is not implicitly existent in neither commercial presence (only NT & MFN) nor cross-border supply which is 3 lines about further liberalization discussions.
Colombia - Mexico	01-Jan-95	The Parties according to Art. 12-15 they shall submit their reservations to FS sectors. Has not happened last time I checked 15.II.2018.
Colombia - Northern Triangle (El Salvador, Guatemala, Honduras)	12-Nov-09	Pursuant to Art. 12.2 (5) and 13.2 (4) (a) the Agreement does not cover financial services for neither investment nor cross-border supply, respectively.

EIA	Entry into force	Provisions that exclude financial services from the scope of the EIA
Costa Rica - Peru	01-Jun-13	Pursuant to Art. 12.1 (8) and 13.1 (8) the Agreement does not cover financial services for neither investment nor cross-border supply, respectively.
Costa Rica - Singapore	01-Jul-13	Pursuant to Art. 11 (3) and 10.2 (7) the Agreement does not cover financial services for neither investment nor cross-border supply, respectively.
EFTA- Chile	01-Dec-04	Pursuant to Art. 45 the Agreement, no commitments have been undertaken by the Parties in relation to trade in financial services.
El Salvador - Honduras - Chinese Taipei	01-Mar-08	Pursuant to Art. 10.02 (2) (a) and 11.02 (3) (d) the Agreement does not cover financial services for neither investment nor cross-border supply, respectively.
EU - Albania	01-Apr-09	Financial services are covered by the scope of the Stabilization and Association Agreement to the extent that progressive liberalization between the Parties shall occur in the coming years. MFN treatment is only explicitly extended for mode (3) of trade in services. There are no concrete MA and NT commitments, and that is reaffirmed by the absence of Schedules.
EU - Bosnia Herzegovina	01-Jun-15	Financial services are covered by the scope of the Stabilization and Association Agreement to the extent that progressive liberalization between the Parties shall occur in the coming years. MFN treatment is only explicitly extended for mode (3) of trade in services. There are no concrete MA and NT commitments, and that is reaffirmed by the absence of Schedules.
EU - Montenegro	01-May10	Financial services are covered by the scope of the Stabilization and Association Agreement to the extent that progressive liberalization between the Parties shall occur in the coming years. MFN treatment is only explicitly extended for mode (3) of trade in services. There are no concrete MA and NT commitments, and that is reaffirmed by the absence of Schedules.
EU - Serbia	01-Sep-13	Financial services are covered by the scope of the Stabilization and Association Agreement to the extent that progressive liberalization between the Parties shall occur in the coming years. MFN treatment is only explicitly extended for mode (3) of trade in services. There are no concrete MA

EIA	Entry into force	Provisions that exclude financial services from the scope of the EIA
		and NT commitments, and that is reaffirmed by the absence of Schedules.
EU - FYROM	01-Apr-04	Financial services are covered by the scope of the Stabilization and Association Agreement to the extent that progressive liberalization between the Parties shall occur in the coming years. MFN treatment is only explicitly extended for mode (3) of trade in services. There are no concrete MA and NT commitments, and that is reaffirmed by the absence of Schedules.
Guatemala - Chinese Taipei	01-Jul-06	Pursuant to Art. 10.02 (2) (a) and 11.02 (3) (d) the Agreement does not cover financial services for neither investment nor cross-border supply, respectively.
Korea, Republic of - Colombia	15-Jul-16	Pursuant to Art. 8.1 (4) and 9.1 (4) (a) the Agreement does not cover trade in financial services for neither investment purposes nor crossborder supply, respectively.
Korea, Republic of - Chile	01-Apr-04	Pursuant to Art. 10.2 (3) (a) and 11.2 (3) (a) the Agreement does not cover trade in financial services for neither investment purposes nor cross-border supply, respectively.
Korea, Republic of - New Zealand	20-Dec-15	Pursuant to Art. 10.3 (4) and 8.3 (3) (a) the Agreement does not cover trade in financial services for neither investment purposes nor cross-border supply, respectively.
Mexico - Central America	01-Sep-12	Pursuant to Art. 11.2 (3) (a) and 12.2 (2) (b) the Agreement does not cover trade in financial services for neither investment purposes nor cross-border supply, respectively.
Mexico - Uruguay	15-Jul-04	Pursuant to Art. 13-02 (4) and 10-02 (2) (a) the Agreement does not cover trade in financial services for neither investment purposes nor cross-border supply, respectively.
Panama - Chile	07-Mar-08	Pursuant to Art. 10.1 (3) (a) the Agreement does not cover financial services.
Peru - Chile	01-Mar-09	Pursuant to Art. 11.1 (4) (a) and 12.1 (3) (a) the Agreement does not cover trade in financial services for neither investment purposes nor cross-border supply, respectively.
Thailand - New Zealand	01-Jul-05	Pursuant to Article 8.1 trade in services is not captured by the scope of the current Agreement. Services trade is regulated by ASEAN - Australia - NZ.
Trans-Pacific Strategic	28-May06	Pursuant to 12.3 (2) (a) the Agreement does not cover trade in financial services.

EIA	Entry into force	Provisions that exclude financial services from the scope of the EIA
Economic Partnership		
GUAM	10-Dec-03	Pursuant to Article 17 of the FTA, trade in services liberalization is in a primary stage, and accordingly no specific commitments on financial services have been entered.
Iceland - Faroe Islands	01-Nov-06	No commitments have been entered for financial services, and it is unclear from the Treaty text whether trade in services is covered at all.
East African Community (EAC)	01-Jul-10	Neither in the Treaty for the establishment of the East African Community, nor in the Protocol for the establishment of the EAC Common Market, commitments for financial services have been entered, but rather proclamations for regulatory cooperation are set out.
Dominican Republic - Central America	04-Oct-01	Although trade and investment in financial services is covered by the content of the FTA, no country has undertaken any commitments pursuant to the provisions of the Treaty, and following the wording of Article 10.15 future liberalization shall be awaited. Due to CAFTA-DR agreement and the role of the US this liberalization has been achieved in the context of another agreement.

Source: Own analysis, WTO RTA database

The content of the Table above illustrates which are the EIAs that do not regulate trade in financial services. To start with, the common denominator among these regional trade agreements is that their participating countries, on average seem to be financial services net importers, rather than exporters. This means that since their financial industries do not have the capacity to export, and as a result generate revenues through trade in financial services, the inclusion of financial services chapters or commitments is hardly of any relevance to them. On the contrary, it can only hinder the course of the EIA negotiations. To substantiate this claim it suffices to show in the table that the vast majority of the parties to these EIAs are Latin

American and Caribbean countries which, with the exception of Panama,²⁰⁰ are not interested in exporting financial services, because of the nature of their economies.²⁰¹

However, as demonstrated by Stephanou,²⁹ trade in financial services liberalization in EIAs is, *inter alia*, highly contingent upon the bargaining power of the parties to the agreement. The three well-known categories are, the so-called, "North-South" EIAs, which refer to the agreements that are concluded between developing and developed countries, the "South-South" EIAs, signed between developing countries, and the ones between developed countries characterized as "North-North". Unsurprisingly, when it comes to the first category (North-South), due to the existing strong and asymmetric bargaining power between the concluding parties, it is observed that the liberalization of financial services is in the top of the agenda.²⁰² Contrary to that, the second category (South-South), although it is of vital importance for the growth and development of the contracting states, does not seem to be concerned about capturing financial services, or liberalizing them. This pattern is predominantly evidenced in this study, and the content of *Table 3*. Namely, 21 EIAs between developing countries do not cover the trade in financial services, and Latin and Caribbean countries are the main participants.²⁰³

Consequently, it is held that when developing countries conclude trade agreements with one another they do not necessarily include of financial services, for the reason that it is not an area of special interest to their economies. The inclusion of financial services' sectors to their trade agreement does not contribute to their growth, while the negotiating costs would surge. It is efficient from their perspective to leave them out of their EIAs. Nonetheless, when

Panama is an off-shore financial hub which constitutes an important financial services exporter, especially given its size. For general literature, see Juan Luis Moreno-Villalaz, (2005). Financial integration and dollarization: The case of Panama. Cato J., 25, 127.

Specific studies have devoted their attention in how Latin American and Caribbean Countries have liberalized their financial services sectors, and how they have proceeded with the conclusion of EIAs. See for example, Goncalves, Marilyne Pereira, and Constantinos Stephanou. "Financial services and trade agreements in Latin America and the Caribbean: an overview." World Bank Policy Research Working Paper 4181, April 2007; Mario Antonio Marconini, (2006). Services in regional agreements between Latin American and developed countries (Vol. 71). United Nations Publications.

This has been observed in literature, especially with regard to the EIAs that the United States and the European Union have concluded, and it is brought into the spotlight empirically in the context of clearing and settlement commitments, in subsection 5.

The "South-South" EIAs that do not cover trade in financial services are the following: Chile-Colombia, Chile-Costa Rica, Chile-El Salvador, Chile-Guatemala, Chile-Honduras, Chile-Mexico, Chile-Nicaragua, Colombia-Mexico, Colombia-El Salvador-Guatemala-Honduras, Costa Rica-Peru, El Salvador-Chinese Taipei, Guatemala-Chinese Taipei, Mexico-Central America, Panama-Chile, Peru-Chile, GUAM, Iceland-Faroe Islands, Dominican Republic-Central America, East African Community ("EAC"), and Trans-Pacific Strategic Economic Partnership.

developing states negotiate EIAs with "North" states, then they are leveraged into the inclusion of financial services in the agreements. That comes as a natural consequence, since bigger and economically robust countries are more prone to exert pressure and achieve their goals in the conclusion of EIAs. As a result, the same "South" states when they conclude EIAs with "North" states, not only they include financial services in their agreements, but they tend to offer higher commitments than the ones entered in their GATS schedule. The analysis that follows examines the "depth" of the undertaken clearing and settlement services commitments in EIAs. Before bringing our attention to this topic, it is intriguing to succinctly underline another trend observed in the absence of firm commitments on financial services in EIAs.

The analysis so far examines trade agreements as contracts that reflect the rational economic behavior of the participating states. This approach represents the general norm, but the existence of additional means and rationales that are not solely economic and according to which EIAs are designed and implemented should not be disregarded. An example of an alternative course of action is the European Union in the EIAs concluded with Western Balkans; namely, Albania, Montenegro, North Macedonia, Serbia, and Bosnia and Herzegovina.²⁰⁴ These agreements regulate both trade in goods and in services, including financial services, but their primary goal is not to liberalize financial markets of Western Balkans and accrue the associated benefit of free trade, but to stabilize the region and encourage its economic growth.

Another facet of international trade is pertinent to establishing relations between states and promoting their peace and prosperity. The EU through these agreements does exactly that, and meanwhile it extends its geopolitical influence to the territories of the Western Balkans' contracting countries. These Stabilization and Association Agreements are not comprehensive in terms of the commitments inscribed for the liberalization of financial services, but that is exactly because that is not the reason behind the conclusion of these treaties. By signing these treaties the European Union seeks to distribute the benefits of trade to these states, in order for them to grow economically, while being transacting with European Union Member States. The next subsection starts addressing how commitments on financial securities' clearing and

These agreements fall under the Stabilization and Association Agreements that the EU concludes in order to promote peace, freedom, stability, and economic prosperity through trade to the region. For more information, see http://ec.europa.eu/trade/policy/countries-and-regions/regions/western-balkans/.

settlement services are entered in regional trade agreements. Next, the "depth" of these commitments is investigated, using the ones undertaken under the GATS as the benchmark.

3.4 CLEARING AND SETTLEMENT COMMITMENTS IN EIAS: THE COUNTRIES THAT LEAD THE WAY AND THE PLAYBOOK OF INTERNATIONAL DYNAMICS FOR FINANCIAL SERVICES

3.4.1 AGGREGATE NUMBER OF CLEARING AND SETTLEMENT COMMITMENTS IN EIAS

We first investigate the mere number of clearing and settlement commitments that have been *entered* and *received* by WTO Members in the context of the unravelling effects of the exponential spike of regionalism. At the outset, this study illustrates the intentions of EIA parties to further integrate this particular financial services sectors with their trading partners. The countries that are financial services net exporters, as shown in Figure 1, are the ones that strive for higher levels of trade in financial services liberalization, through the preferential trade agreements they conclude. As a result, their trade policy agenda is oriented around the premise of acquiring commitments to that end. By receiving market access ("MA"), and national treatment ("NT") commitments by their EIA partners, the principal challenges, in the form of qualitative and discretionary barriers to trade, that their suppliers can encounter in providing financial services in the respective markets are limited.

Next, after having set out the primary information collected in terms of clearing and settlement commitments, ²⁰⁵ a more detailed analysis proceeds which factors in the specific level of liberalization observed in EIAs, using as benchmark the GATS state of affairs at the multilateral trading field. Additionally, the international dynamics are put into context through a network analysis, whereby the countries with higher leverage are able to steer the behavior of smaller countries into opening their financial services markets to international competition. Geographical and chronological observations comes into play later on. First, Figure 1 below depicts in an aggregate fashion the number of commitments for securities' *clearing and settlement* services that parties to EIAs have *entered* for their trading partners, and accordingly, have *received* from them.

²⁰⁵ Clearing and settlement commitments for the purpose of this figure amount to at least either a national treatment or a market access commitment of a party to an EIA for one of the 3 modes of supply (cross-border supply, consumption abroad, and commercial presence) that constitute the scope of this study.

Clearing & Settlment Commitments in PTAs 19 19 AND STREET OF BREET RED LORD FOR BELLEVIE CHEEK ■ Entered ■ Received

Figure 1: Aggregate Clearing and Settlement Commitments in EIAs

Source: Own analysis and computations based on WTO RTA database

Figure 1 reveals that the countries that are the major financial services net exporters, such as the Members of the European Union, the United States, Singapore, Switzerland and Hong Kong among others, ²⁰⁶ are the ones that have the tendency (i) to provide for commitments in clearing and settlement services, since they have already very advanced financial industries, and they are not afraid of foreign competition, and accordingly, (ii) to receive commitments on this service sector from their EIA partners.

The US financial industry has been traditionally "offensive" in acquiring access to its trading partners jurisdiction, while having the bargaining power to leverage its own terms in trade agreements.²⁰⁷ As the figure shows, the United States comes first in the aggregate number of EIA commitments, having undertaken and received 19 commitments, followed by the European Union, having entered 17 commitments on clearing and settlement services, while having received 15. Panama, Singapore, and Australia are also high on the list. The analysis that follows in sub-section ii, investigates the specific commitments and their intrinsic characteristics.²⁰⁸

To embark on explaining figure 1, the observations have to be examined in parallel with the mere fact that economically robust countries and big regional powers, as the US and the European Union, respectively, have concluded the highest number of preferential trade agreements. Thus, since they have been members to numerous EIAs, it is not striking that these developed economies have acquired a high number of commitments on securities' clearing and settlement services. However, it should be highlighted that out of the 152 EIAs on services, only 100 comprise commitments on clearing and settlement services. Consequently, the fact that these countries have participated in many EIAs is a crucial indicator, but it is not self-evident that their trading partners shall liberalize their financial services sectors. At the same

The data of International Trade Center (ITC) on exports of financial services, computed on the basis of the balance of payments (BOPs), portray that the countries that were the principal financial services exporters for 2016 were the United States (approx. 97 billion USD), the United Kingdom (approx.. 71 billion USD), Luxembourg (approx. 55 billion USD),

Germany, Switzerland, Singapore, Japan, Hong Kong, Ireland, France, Canada, India, China and Australia among others. For detailed data on the imports and exports of financial services see https://www.trademap.org/tradestat/Country-SelService_TS.aspx?nvpm=1|||||||||S07|1|3|1|2|2|1|2|1|.

For a narrative of the liberalization of financial services and the role of the industry, see Constance Z. Wagner (1999), "The New WTO Agreement on Financial Services and Chapter 14 of NAFTA: Has Free Trade in Banking Finally Arrived?", *NAFTA: Law and Business Review of the Americas*, 5, 5.

Since commitments can differ significantly from one another, *infra* the analysis specifically examines the type of commitments that have been undertaken in the realm of preferential trade agreements, and in specific measures their legal trade-liberalizing traits.

time it should not be disregarded that the parties to EIAs cannot be forced to enter commitments on financial services in their EIAs, but rather trade negotiations tend to play a tit for tat game.

To gain a better understanding on the reasons why WTO Members and parties to EIAs negotiate and conclude international trade agreements it is imperative to realize what triggers them to be in the negotiating table in the first place. One of the dominant answers is their belief in the benefits of free trade. Free trade, for starters, urges economic actors to seek and exploit their comparative advantage.²⁰⁹ Subsequently, free trade opens markets and incentivizes firms to be more productive and innovative in order to acquire a better share of the expanded pie; this comes with more competition in the international level. In addition, to these economic rationales it is also free trade that grants peace and prosperity to the nations that play by its rules, as the European Union experiment has proven since the end of World War II. These general benefits of free trade happen to materialize in tangible commitments when it comes to trade in services agreements, either in the context of the WTO or preferential trade agreements.²¹⁰

The general principle is that since countries care to boost their economic growth they are prone to negotiate trade agreements that are suitable for allowing them to export the goods or services sectors that they have a comparative advantage on. For countries to acquire market access to the sectors they wish, they have to offer for something in return. Most of the times they have to provide for favorable treatment to the contracting parties' areas of interest. For a EIA hypothetical, assuming that country X has a very strong financial services industry, that represents 13% of its GDP, while country Y's economy is largely based on tourism, a win-win deal would be for the countries X and Y to negotiate a trade agreement that would open the

The theory of the comparative advantage was conceptualized for the first time in the beginning of the nineteenth century by a British political economist, see David Ricardo, *Principles of political economy and taxation*. G. Bell, 1891. More recently the traditional economic approach to trade agreements has been criticized due to its unrealistic hypothesis on governments' national welfare maximization. For the modern account, so called political-economy approach, that factors in the distributional consequences of trade policies, including rent-seeking, see Kyle Bagwell and Robert W. Staiger. 1999. An economic theory of GATT. *American Economic Review* 89: 215-48; Richard Baldwin, 1985. The Political Economy of U.S. Import Policy. Cambridge: MIT Press; Kyle Bagwell and Robert W. Staiger, 2001. Reciprocity, nondiscrimination and preferential trade agreements in the multilateral trading system. *European Journal of Political Economy* 17: 281-325. See also for a comprehensive account of the economic theories behind trade see Kyle Bagwell and Robert W. Staiger, 2002, The Economics of the World Trading System, MIT Press, pp. 13-42.

For a contribution that captures the intricacies and particularities of services trade and its negotiations see Bernard Hoekman and Aaditya Mattoo, Services trade and growth, pp. 21-58, and Juan A. Marchetti and Martin Roy, Services liberalization in the WTO and in PTAs, pp. 61-112 in Marchetti, Juan A., and Martin Roy, eds. Opening Markets for Trade in Services: Countries and Sectors in Bilateral and WTO Negotiations. Cambridge University Press, 2008.

financial services market of Y to the service providers of X, and at the same time would incentivize tourism trade-flows towards Y. On that premise trade negotiations are carried out, but in some occasions it is not only rationale economic thinking that dictates the terms of negotiations, but also the influence that big countries exert over smaller ones.

That has traditionally been the case for trade in financial services, since the first time they were regulated multilaterally under the GATS. The US financial industry lobbied for that in order to increase its share of the pie, and WTO Members followed up for their own reasons. For the purposes of this thesis, it is essential to realize who are the main players in the international financial services arena, in order to develop a comprehensive analysis of the clearing and settlement services in EIAs in the first place, and to proceed by assessing how these countries conclude their EIAs, and under which terms and conditions. By now, it is clear that it is the European Union and the United States that internationally pull the strings for financial liberalization,²¹¹ and it is this study's mission to witness how this trend is effectuated in the context of the financial service in question in EIAs. Accordingly, the analysis proceeds by measuring the "depth" of liberalization on clearing and settlement services in EIAs, and furthermore, scrutinizes the state of play of the EIAs that the United States and the European Union have concluded.

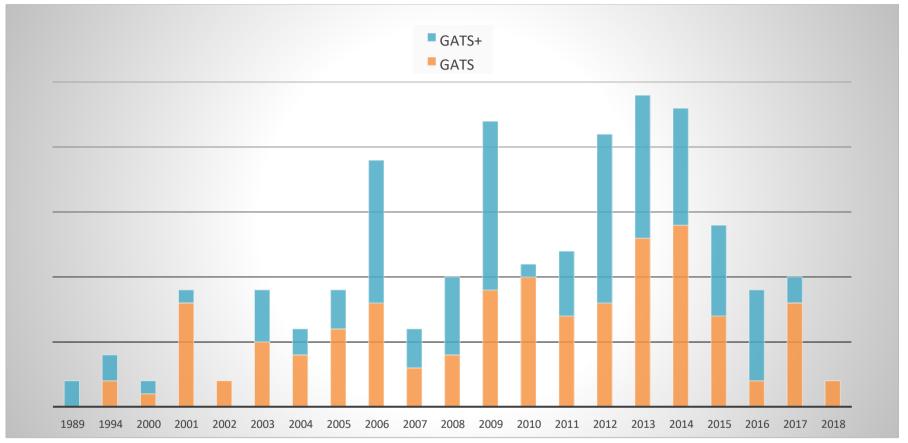
3.4.2 MEASURING THE DEPTH OF CLEARING AND SETTLEMENT COMMITMENTS IN EIAS

The objective of this sub-section is to elucidate on the depth of the undertaken commitments on financial securities' clearing and settlement services in regional trade agreements, and at the same time investigate the driving factors and relevant parameters that are of importance in that endeavor. At the outset, this study denotes, as described in Section II, the level of liberalization on the basis of the *status quo* of WTO

The difference between financial liberalization and the liberalization of financial services lies in the fact that the first constitutes the broader category that the second is a subset of. On the one hand, financial liberalization refers to the elimination of distortions in domestic financial systems which impede the efficient allocation of capital and the functioning of competition. On the other, the liberalization of financial services, as has been demonstrated in this *chapter*, pertains to the elimination of quantitative restrictions in the access of foreign financial services suppliers, in the form of the principle of market access, and to the elimination of discriminatory treatment, through the national treatment principle. For literature on financial liberalization see, for example, Graciela Kaminsky & Sergio Schmukler (2002). Short-run pain, long-run gain: the effects of financial liberalization. The World Bank; Sergio Schmukler & Graciela Kaminsky (2003). Short-Run Pain, Long-Run Gain: The Effects of Financial Liberalization (No. 3-34). International Monetary Fund; Stijn Claessens and Marion Jansen eds. (2000), The Internationalization of Financial Services: Issues and Lessons for Developing Countries, The World Bank and WTO; Barry R. Johnston (1998), "Sequencing Capital Account Liberalizations and Financial Sector Reform", IMF Paper on Policy Analysis and Assessment 98/8.

Members at the multilateral trading system, namely WTO Members' GATS commitments. Specifically, (i) *GATS*, once the level of liberalization is the same as in the Members' GATS schedule, (ii) *GATS plus*, once the Member provides for commitments in addition to its GATS schedule, and (iii) *GATS extra*, once the Member enters commitments for clearing and settlement services for the first time in EIAs. Categories (ii) and (iii) are together compounded as *GATS*+, for the sake of simplicity as the analysis of this empirical study unfolds. As a first step, figure 2 sets out the whole aggregate clearing and settlement services commitments in EIAs, which are 226 in total, charted in the *y* axe of time. This chronological illustration underscores whether the depth of liberalization (either at the same level as in the WTO "GATS" or going beyond "GATS+") evolves. The value of this graph lies in offering a holistic perspective of the way commitments in this financial services sector are entered in international trade and investment agreements over time.

Figure 2: Level of Liberalization of Clearing & Settlement Commitments in EIAs over time



Source: Own analysis and computations based on WTO RTA database

To interpret this figure accurately, it is imperative to understand first that out of the total number of commitments entered in EIAs for clearing and settlement services, half of them have adopted the GATS standard, whereas the other half has exceeded the GATS threshold.²¹² What can also be discerned by the bars of the graph is that although in general there is an equilibrium between the GATS and the GATS+ commitments over the years, in 2006, 2009, 2012, and 2016 higher level of liberalization for clearing and settlement services has been effectuated in EIAs. It is extremely difficult to distinguish the determinants that drive these EIAs' *GATS*+ commitments, but the analysis proceeds by tracing the route these commitments follow, in order to reveal which countries open their clearing and settlement markets at first, and to whom through the conclusion of the economic integration agreements as a second consideration.

Subsequently, the empirical analysis focuses on the *GATS*+ commitments on financial securities' clearing and settlement services in international trade treaties. By exclusively examining this set of commitments it is easier to discern the factors that result in furthering the liberalization of financial services. To that end, the EIAs that liberalize clearing & settlement services beyond the GATS threshold are put into the microscope, Figures 3 and 4 set out the route that these commitments follow, and ultimately, their intrinsic characteristics are investigated below. Pursuing the objective of delineating which are the contributing factors in the liberalization of clearing and settlement services, Figures 3 and 4 underscore which are the countries that enter GATS+ commitments in EIAs, and which are the states that reap the benefits of this liberalization, respectively.

To be precise, computations based on the WTO RTA database reveal that 54,42%, till the 23rd of May 2018, have used their GATS level of liberalization for financial securities' clearing and settlement services, whereas 45,58 have opted for deeper liberalization in the services sector in question. Should be reiterated that the figures here represent the commitments that provide for this services liberalization in EIAs, and not the ones that don't ("Unbound" for example), although this lack of commitment would represent the same level of liberalization as the one inscribed in some countries GATS schedules.

Figure 3: WTO Members entering GATS+ Clearing and Settlement Commitments in EIAs

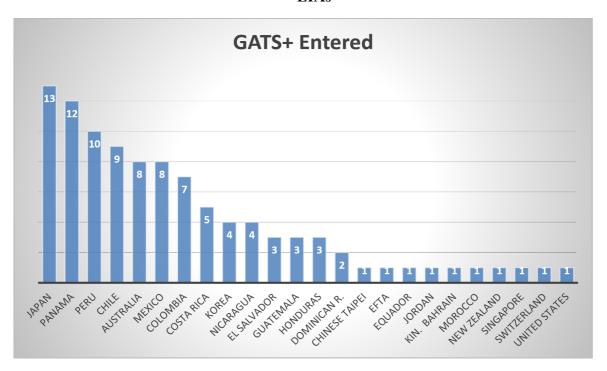
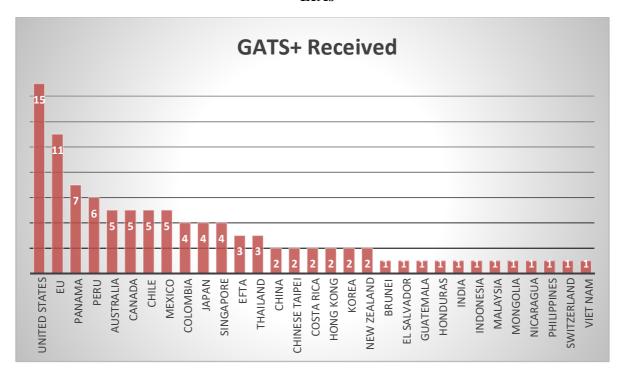


Figure 4: WTO Members receiving GATS+ Clearing and Settlement Commitments in EIAs



Source: Own analysis and computations based on WTO RTA database

Figures 3 and 4 are very intuitive because they demonstrate the state of play of the liberalization of clearing and settlement services in EIAs. Essentially these two graphs show how *GATS*+ commitments on the services in question are distributed in EIAs. They explicitly underscore which countries are the net contributors, and which are the net beneficiaries. The results speak for themselves, but here we will try to contextualize these liberalization features, in order to make some sense out of this. The analysis first touches on the issues pertinent to the WTO Members that liberalize their financial services, in addition to the GATS *status quo*.

To understand what goes beyond the GATS it is essential to understand first that the legal architecture of trade in services at the WTO is inherently asymmetric. This comes as the result of the political compromise that WTO Members stroke during the Uruguay Round in order to incorporate the regulation of trade in services in the text of the Marrakesh Agreements.²¹³ Trade in services, unlike trade in goods which is easier to engage in for developing economies, requires high expertise and is not inclusive in terms of the capacities that states and their industries have to achieve growth through its mechanics. By default advanced economies have a comparative advantage in trading services. To compensate for that and for the developing states to be persuaded in a consensus at the multilateral trading system, the provisions under the title "Commitments" had to be introduced. These commitments allow to WTO Members to provide for (progressive) liberalization to their services sectors, through market access and national treatment principally, as they please. Consequently, referring to the GATS asymmetric architecture means that each WTO Member has defined its own depth of liberalization in its GATS Schedule of commitments, and as a result there is no homogeneity. This context is furnished to accentuate that not all countries share the same starting point in liberalizing their services' sectors in the GATS, and financial services are not an exception to the rule.

When it comes to EIAs, the same principle applies with the difference that the liberalization attained under these agreements does not extend to all WTO Members, but only to the ones that are parties to the specific preferential trade agreement, which is in accordance with the GATS Article V.²¹⁴ The rationale of this provision is to encourage further liberalization of services, even this integration extends its benefits only to parts of the WTO system, assuming the conditions of the GATS Article V are fulfilled. For the purposes of this

²¹³ See Mavroidis & Marchetti above *note 11*.

GATS Article V, under the title "Economic Integration", provides for the legal basis on which regional trade agreements on services are concluded.

study, shall be stated that the existence of the GATS immense discretion in scheduling commitments has produced divergences in the liberalization of services among WTO Members. As a result, some countries have way more ground to cover to reach the levels of other countries. Additionally, financial services is a sector that traditionally protectionist policies are attached to, and clearing and settlement services do not deviate from this pattern.

Not surprisingly, the vast majority of WTO Members that go deeper than their GATS commitments on securities' clearing and settlement services while concluding EIAs are developing states, such as Panama, Peru, Chile, Colombia, Costa Rica etc. This can partially be explained by the fact, that these states have lots of room to cover to liberalize their financial market infrastructure to the levels of developed WTO Members. This divergence on the liberalization of financial services can be easily exemplified by taking a look at the 20 states that have adopted the Understanding on the Commitments on Financial Services in contrast to the remaining WTO Members. In addition to that, some developed states as well opt for further opening their clearing markets, such as Japan, Australia, and Korea. To fully capture the dynamics that drive these states to the underlying policy decisions in EIAs, it is essential to investigate graphs 3 and 4 *in tandem*, in order to see which are the countries that are on the other side of the table, and accordingly, potentially reap the benefits of such liberalization effects.

Figure 4 very clearly illustrates that it is the *European Union* and the *United States* that secure better liberalization conditions for clearing and settlement services through the conclusion of EIAs, in terms of market access and national treatment commitments. This is a ramification of their asymmetric bargaining power and strong interest in exporting financial services. As a result, their EIAs reflect these two contributing factors, and this is bluntly portrayed in the *GATS*+ commitments the EU and the US receive for the financial services sector in question. The next subsection explicitly oversees which are the WTO Members that offer these GATS+ commitments to the EU and the US to complete the picture of the regulation of international financial instruments' clearing and settlement trade flows.

3.4.3 THE ROADMAP OF GATS+ CLEARING AND SETTLEMENT COMMITMENTS FOR THE EU AND THE US IN EIAS

This subsection underlines which are the countries that offer GATS+ commitments to the EU and the US through the regional trade agreements they have concluded. As figures 5 and 6 show, the countries that inscribe GATS+ commitments in their schedules of

commitments or lists of reservations with the US and the EU are highly similar with Latin American and Caribbean countries being the common denominator for the EIAs that both states have concluded.

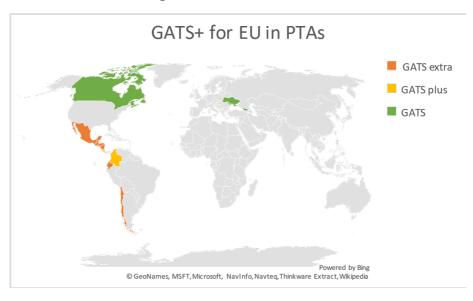
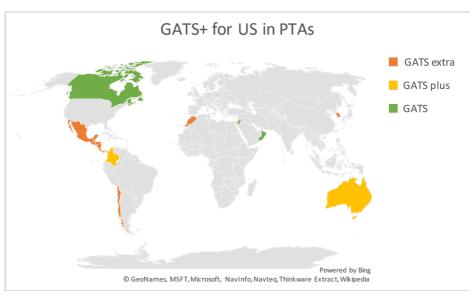


Figure 5: EIAs with the EU





Source: Own analysis and computations based on WTO RTA database

These graphs show how securities' clearing and settlement services are regulated and liberalized in EIAs. Nonetheless, the liberalization of financial services is not only contingent on commitments undertaken under either the WTO or regional trade agreements, but most

importantly it is dependent on the regulation of financial services by WTO Members. In a perfect universe, trade provides the norms and principles, such as non-discrimination and transparency, on the basis of which regulatory standards are constructed, assuming that market access and national treatment commitments have been inscribed for particular services sectors. Allowances must be made that trade sets out the general liberalizing patterns for services sectors, but it is the regulation of these sectors that prescribes the details and the specific conditions that domestic and foreign service providers have to comply with to ply their services. Thus, the trade of financial services is such a delicate field of law because the regulation of the services in question has to be calibrated with the international commitments of states under the GATS and other regional trade agreements. The next section ventures into an examination of the general patterns of the regulation of clearinghouses in the aftermath of the 2007-2009 global financial crisis, and serves as a utility to compass around the interaction between financial regulatory standards and regionalism.

4. FINANCIAL MARKET INFRASTRUCTURE REGULATION AND THE STATES' SILOS IN NEGOTIATING EIAS

This section aims to illustrate how the regulation of clearing services after 2010 has imminently changed the industry and has provided for the international standard on the basis of which the international clearing flows are effectuated, and to reveal that EIAs that have been concluded after 2010 do not seem to either mirror or adapt their scope to the twists and turns that industry has followed. Yet, international trade law and financial regulation are disparate legal disciplines, with different mechanics and points of reference. However, since they both prescribe legal norms for the regulation of the financial services' sector in question, one would reasonably expect that synergies exist between the two legal orders in order to promulgate a coherent set of rules, rather than having two systems that do not interconnect at all. The analysis underscores an absence of coordination between the trade and finance teams of WTO Members' administration, and wonders to what degree this deficiency can be mitigated either domestically, through convergence and/or constant exchange of information between the financial regulatory/supervisory authorities and the trade teams tasked with trade in financial services responsibilities.²¹⁵

For example, while negotiating international trade treaties government officials vested with negotiations of trade in financial services should be aware of all the regulatory developments in their own jurisdiction and the country with which they would be negotiating commitments/reservations for financial services sectors in order to achieve more efficient outcomes.

In response to the G20 accord, States started heavily regulating the clearing of OTC derivatives around the world. Prudential regulations of clearinghouses seek to mitigate the risks associated to the trading of derivatives that can have a seismic impact from a financial stability perspective. To that end, financial rulebooks around the world have been very comprehensive in regulating the industry and all its specific characteristics. One of the aspects of these regulatory standards pertains to how clearinghouses from foreign jurisdictions can provide their services in domestic markets, to domestic entities or even having a substantial effect on them. These set of rules that permit foreign clearinghouses market access fall in general under the category of regulation called "third-country equivalence" or "substituted compliance" in the EU and the US, respectively.²¹⁶ Therefore, for foreign clearinghouses to offer their services in other jurisdictions the key is to comply with the abovementioned regimes.

Nonetheless, the regulation of international trade either under the WTO or under preferential trade agreements provides for its own set of rules for financial services, either in the form of market access or national treatment commitments, or in the form of recognition provisions. Due to the intricacies of financial regulation and the existing silo between trade and finance administrations, trade delegations at the WTO and the EIA negotiating teams do not seem to take account of the challenges ahead relevant to the regulation of financial market infrastructure. This claim is substantiated by the fact that *the regulatory change on the role of clearinghouses globally is not reflected in anyway in the content of EIAs*. To buttress this view it suffices to say that when a financial sector is subjected to major shifts of that scale, as the case of clearinghouses, which heavily impact on the terms-of-trade, it is only for international economic law to react accordingly in order to adjust to new realities. Therefore, by closely following the evolution of financial services, international economic law should utilize its toolkit so that not only it keeps up with the financial industry's progress, but also facilitates the integration of these services through encouraging international trade-flows. Nevertheless, this approach does not side with reality.

The drastic swift on the regulation of the financial industry described above is not captured by regionalism. Namely, neither the lists of reservations nor the schedules of commitments of the parties to EIAs, concluded after 2009, keep track with the changes. Alternatively, EIA parties by just inscribing next to the clearing and settlement category of

For an analysis of the European regulatory framework and the examination of its consistency under WTO law see George A. Papaconstantinou, *note 21*.

their commitments that the supply of the services at issue hinges on specific provisions of their financial rulebooks, that translate the substituted compliance/third country equivalence frameworks, would have made a difference because at least the content of the trade agreement would provide for legal certainty with regards to the treatment of the financial sectors in question and would be consistent with the legal practices promulgated by states financial regulatory/supervisory authorities. However, this is emphatically not the case in EIAs, as evidenced by this study, and interestingly there is no mention of OTC derivatives as such in the content of preferential trade agreements in general, no matter their importance for many financial services sectors, and for securities' clearing and settlement *in concreto*, which are vested with harnessing it. Thus, the absence of coordination evidenced in this study brings into the spotlight the existent silos in WTO Members' administrations between finance and trade.

An additional dimension that trade delegations seem to disregard relates to the fact that financial services industries develop rapidly due to either the impetus of technology, ²¹⁷ or the role of regulation in financial markets. Thus, it is imperative to device a mechanism in preferential trade agreements in order to revise the inscribed commitments or lists of reservations, on the basis of impact assessments that calibrate the existing legal texts to the new realities. Allowances should be made in respect of the specific means regarding the procedures of these revisions so that abusive practices are avoided. Such a scheme would be doubtful under the WTO, since negotiation rounds have stagnated for a long period. However, under EIAs one would expect that there is much room for improvement in that score because the parties to international trade agreements are more flexible and on average they are homogeneous.

Ultimately, this contribution suggests that assuming that there were more efficient synergies between the trade and finance teams of WTO Members, the associated benefits for the liberalization of trade in financial services would be greater. First, because financial

Technological progress tends to challenge the traditional forms of banking and finance and accordingly, change the financial industry as we know it. Innovations such as artificial intelligence or block chain technologies nowadays spearhead the emergence of maverick companies and as a result many traditional financial services providers have started facing more competition. See, for example, Ioannis Lianos, Philipp Hacker, Stefan Eich & Georgios Dimitropoulos (Eds.). (2019). Regulating Blockchain: Techno-Social and Legal Challenges. Oxford University Press; Peter Yeoh (2017). Regulatory issues in blockchain technology. Journal of Financial Regulation and Compliance, 25(2), 196-208; Kevin Werbach (2018). Trust, but verify: Why the blockchain needs the law. Berkeley Tech. LJ, 33, 487; Wonnie Song (2017). Bullish on Blockchain: Examining Delaware's Approach to Distributed Ledger Technology in Corporate Governance Law and Beyond. Harv. Bus. L. Rev. Online, 8, 9; Kristin Johnson, Frank Pasquale & Jennifer Chapman (2019). Artificial Intelligence, Machine Learning, and Bias in Finance: Toward Responsible Innovation. Fordham Law Review, 88(2), 499; Martin Arnold, Financial Times https://www.ft.com/content/2f6f5ba4-dc97-11e6-86acf253db7791c6.

rulebooks would have transparent standards that can only promote trade openness and liberalization. This would contribute to reducing or eliminating non-discriminatory structural barriers to trade in financial services generated by unfair and opaque regulatory procedures and would ensure that parties to economic integration agreements do not use their regulatory processes to undermine undertaken market access and national treatment commitments (both at the multilateral and at the plurilateral trading system). Second, because the content of EIAs would be better informed about reflecting financial services sectors legal state of play, and as a result ameliorate the plurilateral trading relations and deepening their markets. This trade liberalizing outcome would emanate from EIAs' parties willingness to tackle non-qualitative and non-discriminatory structural barriers to trade in order to open their respective markets and achieve more development and growth.²¹⁸ Third, because trade liberalization and financial regulation need to work in parallel in order to tame financial innovation and to achieve financial stability, while at the same time eliminating anticompetitive barriers to trade that cannot be justified on prudential justifications and serve to limit "market access" to service suppliers from third countries.

5. CONCLUDING REMARKS

This thesis comprehensively evaluates in an empirical analysis the depth of liberalization attained in the plurilateral trading system for the financial services of securities' clearing and settlement in the aftermath of the global financial crisis. This endeavor is driven by the need for examining the regulation of international trade and the one of financial services in parallel in order to attain legal certainty for the provision of the services in question, and to avoid situations under which the regulation of the one discipline does not capture the legal issues promulgated by the other, as it is the case argued by this study.

The findings of this *Chapter* indicate that the integration of international financial market infrastructure services in economic integration agreements goes significantly beyond the threshold achieved in the WTO system by the GATS schedules of commitments. More importantly, it is observed that the beneficiaries of financial services liberalization traced in the clearing and settlement services of securities are principally the European Union and the United

This would only happen subject to States' willingness to achieve those results. It is important to bear in mind that beyond the market integration principles embedded in the GATS and in EIAs, there are more efficient liberalizing tools, discussed in the next *Chapter* (e.g. harmonization, application of competition/antitrust rules), that could be utilized by Economic Integration Agreement parties to the extent there is political appetite to do so.

States. The main explanations for this trend put forward by this study are pertinent to the 2 States' bargaining power alongside with their strong interest in opening third countries' markets to their own financial service providers.

Ultimately, we evaluate how the regulation of financial market infrastructure, and in particular the one on clearinghouses crafted after 2010 comes to grips with the way preferential trade agreements are structured and deal with the services in question. We find that the silos in WTO Members' administrations between trade and finance teams are striking and that is substantiated by the mere fact that there is no indication in the content of EIAs that something has changed in terms of this financial services sector since 2009, even for the trade agreements concluded thereafter. This is problematic mainly for two reasons: first, because international trade law does not reflect and factor in the legal realities and regulatory standards, which represent the most important hurdles to services trade, which result in legal uncertainties; second, because both legal disciplines set out the rules for the operation of financial services it is quintessential to update EIAs in accordance with the mandates of financial regulation and not relying excessively on provision such as the prudential carve-out, so that further integration of financial services is attained. Finally, study argues that in order to remedy the mismatch between the evolving regulation of financial services and the static content of international economic agreements a frequent updating process of the agreements is required.

The next *Chapter* evaluates the tension between the regulation of financial market infrastructure and economic integration in the context of European Union – the most integrated economic system of different States there is. The EU single market is effectively an endeavor to attain "EU contestability of markets" by meeting comprehensive liberalization patterns, including, *inter alia*, national treatment and market access, removal of non-discriminatory structural barriers through the harmonization of regulatory frameworks and the principle of mutual recognition, freedom of capital movements and, last but not least, the application and enforcement of EU competition law. The forthcoming analysis focuses on the role of financial regulation and the application of EU competition law in integrating the European internal market due to their prominence as trade liberalizing tools. The qualitative methodology put forward by this study, as demonstrated *infra*, takes into consideration the seminal role of

For an interesting take on the notion of "international contestability of markets" and, specifically, the comparative advantages embedded in the European Union model, see Sydney J. Key, (2003) *The Doha Round and financial services negotiations*. American Enterprise Institute, p. 53-54.

financial regulation and competition law in liberalizing the EU market – both to internal and external competition – while at the same time it accounts for the EU industry's global competitiveness.

PART IV: FINANCIAL REGULATION AND EU COMPETITION LAW

A Case Study of the Regulation of Clearinghouses and Competition Law and Policy in the EU

1. Introduction

This *Chapter* seeks to further shed light on this thesis inquiry on how the regulation of financial services interacts with different economic integration settings. To this end, the interface between *financial regulation* and *competition/antitrust law* is investigated in order to assess how the tension plays out in the case study at hand. So far, the integration models explored in the previous *Chapters* (WTO in *Chapter II* and EIAs in *Chapter III*) do not provide for as much liberalization as the EU model does. The rules that define the functioning of the EU internal market result in a more integrated outcome for European Union Members in comparison with other integration models (either in the form of the multilateral trading system or in the form of plurilateral treaties that solely rely on the traditional trade-liberalizing instruments described above (e.g. market access, national treatment)) for a number of important reasons.

Most importantly, the European Union model achieves a higher degree of integration of the financial market infrastructure of its Member States because it manages to tackle non-discriminatory and non-qualitative structural barriers. Specifically, the EU rulebook goes above and beyond in terms of integration due to the *harmonization* of specific set of rules across jurisdictions for the provision of financial services, the intra-EU mutual recognition,²²⁰ and the application of *competition/antitrust law*. The role of both harmonization/mutual recognition and competition law for achieving the integration of the EU internal market have been

The principle of mutual recognition in the EU legal order was introduced in 1979 with the *Cassis de Dijon* ruling of the European Court of Justice. For literature emanating from this judgment, see, for example, Christine Janssens (2013), Mutual Recognition in the European Union, Oxford University Press; Kalypso Nicolaidis, (2017) 'The Cassis Legacy: Kir, Banks, Plumbers, Drugs, Criminals and Refugees' in B. Davies and F. Nicola (eds.), European Law Stories: Critical and Contextual Histories of European Jurisprudence, Cambridge University Press; Joseph H. H. Weiler, (2005) Mutual Recognition, Functional Equivalence and Harmonization in the Evolution of the European Common market and the WTO, in The Principle of Mutual Recognition in the European Integration Process 25 (Fiorella Kostoris Padoa Schippoa eds.). Additionally, Nicolaidis provides for a thought-provoking examination of the current state of play of the principle of mutual recognition in the context of the first example of disintegration in the European Union, Kalypso Nicolaidis, (2017) 'Mutual Recognition: Promise and Denial, from Sapiens to Brexit', *Current Legal Problems*, vol. 70, no. 1, pp. 1-40.

thoroughly explored by literature.²²¹ In light of this, this *Chapter* solely focuses on deciphering the current tension between the EU financial regulation and competition/antitrust law. Thus, the EU is selected as a case study due to its liberal economic integration model – which is arguably the most integrated one globally – driven by the forces of competition law and policy and the interaction between financial regulation, exemplified by the EU regulation of clearinghouses, on the one hand and EU antitrust law, on the other, is evaluated to draw conclusions about the relationship between the two.

In particular, the European Union is an indispensable case study for the endeavor of this thesis to investigate the tension between the regulation of clearinghouses and separate economic integration models for the following reasons: (i) EMIR has implemented the standards promulgated by G20 and therefore is one of the most developed financial regulatory frameworks at the global level; (ii) the case study raises stability, supervision, and considerations in the context of Brexit for the purposes of the cross-border clearing of specific financial instruments; (iii) the EU clearinghouses regulation has in itself procompetitive elements that seek to increase competition in the EU internal market; (iv) EU competition/antitrust law has consistently resisted and targeted monopolization in financial market infrastructure; (v) EU competition law and enforcement, through the European Commission, are global standard setters as national competition authorities ("NCAs") draw inspiration on how rules are to be applied; and (vi) the EU clearinghouses regulation in conjunction with antitrust law define to a high extent the terms of trade of international clearing flows, as this *Chapter* demonstrates.

One of the most prominent driving forces of the EU's internal market is no other than competition. From an EU law perspective, referring to EU economic law includes the four fundamental freedoms and competition law. For the purposes of this *Chapter*, the covered scope includes the analysis of EU competition law in financial market infrastructure due to its prominence in liberalizing financial services *in tandem* with financial regulation. An additional

See, for example, Luis Miguel P. P. Maduro, (1998). We the Court: The European Court of Justice and the European Economic Constitution. Bloomsbury Publishing; Saul Estrin & Peter Holmes, (1998). Competition and economic integration in Europe. Edward Elgar; Gerda Falkner, Oliver Treib, Miriam Hartlapp, & Simone Leiber (2005). Complying with Europe: EU harmonisation and soft law in the member states. Cambridge University Press; Simon Deakin, (2000). Regulatory competition versus harmonisation in European Company law. ESRC Centre for Business Research, Department of Applied Economics, University of Cambridge; Emilios Avgouleas, (2000). The Harmonisation of Rules of Conduct in EU Financial Markets: Economic Analysis, Subsidiarity and Investor Protection. European Law Journal, 6(1), 72-92; and Christian Twigg-Flesner, (2011). 'Good-Bye Harmonisation by Directives, Hello Cross-Border only Regulation?'-A way forward for EU Consumer Contract Law. European Review of Contract Law, 7(2), 235-256.

reason why competition law is selected as the most instrumental economic integration paradigm in the European Union is because over the last decade it has – in multiple cases – sought to integrate the financial market infrastructure of the EU either through the decisions of competition authorities or through the judgements of EU courts.

To investigate comprehensively this interface it is necessary to factor in the Brexit current state of play, as critical stability and supervisory considerations are raised in addition to purely economic interests between the EU and the UK. A new study would be warranted to thoroughly assess this integration model once decided. However, due to the uncertainty attached to the precise outcome of Brexit negotiations in the time of writing, this *Chapter* does not purport to exhaustively analyze all the relevant issues. Instead, I elaborate on the key angles that serve this thesis' analytical framework. Namely, how would Brexit impact the flows of clearing services between the EU and the UK and to what degree does this development impact on the international competition landscape in the industry and the competitiveness of European clearinghouses; the regulatory and supervisory arrangements in place together with the review of EMIR provide for the context from which I draw tentative conclusions.

As to the nature of this inquiry, it is important to understand from the outset that this *Chapter* evaluates EU financial regulation and competition law together. The two fields of law are in constant tension and I seek to extrapolate how they together contribute to liberalizing the financial market infrastructure in the European Union. To that end, the forthcoming analysis in each subsection evaluates how specific financial regulatory measures and competition decisions and judgements foster liberalization in financial market infrastructure. In doing this, I take account of three parameters; namely, (i) the competitive landscape in the EU; (ii) the global competitive landscape; (iii) the EU industry's international competitiveness. These indicators are selected because they can clearly demonstrate the benefits for the liberalization of clearing services and the advantages of the EU integration model.

The forthcoming analysis on the importance of competition law in liberalizing the EU market of financial infrastructure is not limited to back-end infrastructure services (i.e. clearing and settlement) as opposed to the case studies of the multilateral and the plurilateral trading system do. It also covers trading of financial instruments because (i) the EU regulatory frameworks for clearing (EMIR) and for trading (MiFID II) and intimately connected in their attempt to open the EU financial market infrastructure – as demonstrated *infra*, (ii) those two financial services sectors tend to be provided by the very same institutions (e.g. trading venues

that also provide clearing and settlement services) and if they were to examined separately by only focusing on one or the other we would miss the whole picture on how the application of competition law fosters the integration of financial market infrastructure, and (iii) to provide a comprehensive account of how EU competition law contributes to the liberalization of financial market infrastructure the examination of the prominent body of case law on trading cannot be disregarded.

Overall, the findings of this study indicate that the EMIR existing system and EU competition/antitrust law have a positive effect on the terms of trade in clearing services. They both contribute to increasing competition in the provisions of the services of clearinghouses both at the EU and at the global level. Also, they do not seem to favor the European industry's big players and thus they do not boost the EU's global competitiveness. Conversely, a preliminary assessment of the regulatory framework surrounding Brexit reveals that the latter indicators (EU and global competition landscape, and EU industry's competitiveness) are in decline. Brexit as an unprecedented example of disintegration in the EU is naturally affecting the terms of trade for clearing services both for the EU and the UK but also for third-countries. Allowances should be made as stability considerations are invoked by the EU but their necessity and proportionality cannot be assessed at this stage.

This *Chapter* develops as follows: *Section II* elaborates on the EU financial regulatory elements that purport to increase competition in the European financial infrastructure for clearing services. The antitrust elements of this study are included in *Section III*, which delves into how competition law liberalizes financial market infrastructure in the EU and its efficacy is evaluated. Further, *Section IV* briefly addresses the contentious aspects that have arised between the EU and the UK with respect to clearing services in the advent of Brexit. *Section V*, supplements the discussion with the relevant international trade law elements that are of the essence for the application of competition in financial services. Finally, *Section VI* draws conclusions as to the relationship between the regulation of clearinghouses and competition law and policy.

2. REGULATION AS A COMPETITION STIMULUS IN THE EU FINANCIAL MARKET INFRASTRUCTURE

2.1 FINANCIAL REGULATION IN THE PURSUIT OF BREAKING UP SILOS

The European Union Regulation on OTC derivatives, CCPs and trade repositories (also referred to as EMIR), the third-country equivalence regime of which was thoroughly assessed from a WTO perspective in Chapter II, alongside with the Markets in Financial Instruments Regulation²²² ("MIFIR") purport to get rid of commercial barriers that could be able to prevent competition in the clearing of securities. Importantly, those financial regulatory frameworks require (i) central counterparties to accept securities for clearing irrespective of the trading venue; (ii) trading venues to offer trade feeds to clearinghouses; and (iii) benchmark owners to provide central counterparties and trading venues with the possibility of acquiring licenses. In doing this, non-discriminatory and transparent standards should be applied by the financial market infrastructure actors. The forthcoming analysis sheds light on the most relevant regulatory elements that boost competition in clearing markets.

It is important to note that the financial industry is integrated vertically to a very high extent. As a result, the use of services from competing firms represents the exception rather than the norm in many sectors. In the same vein, financial market infrastructure has been traditionally vertically integrated and most clearinghouses are usually part of groups with regulated markets – such as stock exchanges. Understanding that these silos are likely to culminate in creating barriers to entry for the purposes of the supply of financial infrastructure services within the EU internal market, the European Union financial regulation at hand seeks to encounter this situation. As CCPs and trading venues are deeply integrated structures – as also evidenced in the merger control section of this *Chapter*, MiFIR and EMIR seek to break

See Regulation (EU) No 600/2014 of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments, being part of the MiFID II regulatory package. For literature on the reforms brought by MiFID II see, for example, Federico Della Negra (2019), MiFID II and Private Law: Enforcing EU Conduct of Business Rules, Hart Publishing; Guido Ferrarini & Niamh Moloney (2012), Reshaping order execution in the EU and the role of interest groups: from MiFID I to MiFID II. European Business Organization Law Review (EBOR), vol. 13, no.4, pp. 557-597; Ian Sheridan, (2017). MiFID II in the context of Financial Technology and Regulatory Technology. Capital Markets Law Journal, 12(4), 417-427; Danny Busch, (2016). MiFID II: regulating high frequency trading, other forms of algorithmic trading and direct electronic market access. Law and financial markets review, 10(2), 72-82; Stefan Grundmann (2013). The Bankinter case on MIFID regulation and contract law. European Review of Contract Law, 9(3), 267-280; Stefan Grundmann (2018). Das grundlegend reformierte Wertpapierhandelsgesetz—Umsetzung von MiFID II (Conduct of Business im Kundenverhältnis). Zeitschrift für Bankrecht und Bankwirtschaft, 30(1), 1-19; and George A. Papaconstantinou (2016), Investment bankers in conflict: the regime of inducements in MiFID II and the member states' struggle for fairness. European Review of Contract Law, vol. 12, no. 4, pp. 356-390.

up these silos by prescribing: (i) access rights for CCPs; and (ii) access rights for trading venues.

The following two graphs illustrate how the two financial regulatory frameworks seek to achieve further integration of the financial market infrastructure industry in the European Union:

Figure 7: Silo structure between CCPs and trading venues

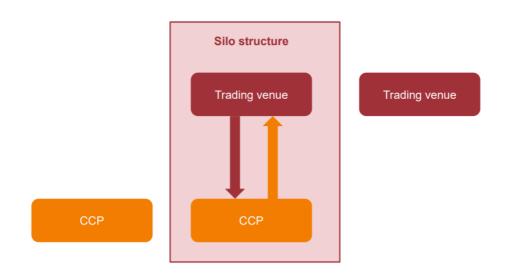
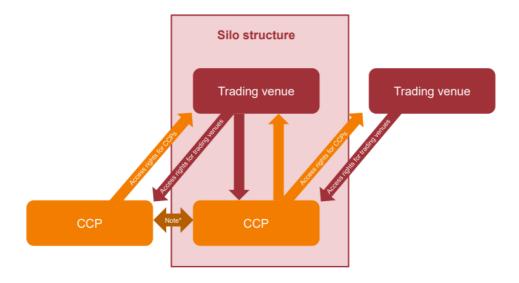


Figure 8: EMIR and MiFIR addressing the silo



Notably, the key principle that underpins the EU's approach to the integration of financial market infrastructure – including the services of clearinghouses – is open access.²²³ Open access implies that unrestricted access to financial institutions is expected to make competition flourish in the relevant markets. As a result, open access seeks to offer lower prices, higher quality of services and lower cost structures to the market participants of financial market infrastructure. It emanates from this, that open access would result in non-discriminatory access to all trading and clearing infrastructures. In the absence of discriminatory conditions on gaining access to trading venues for clearinghouses, the parties using the services of CCPs can reduce or net against their clearing margins through aggregated and enhanced liquidity pools as they would have access to the most efficient service providers.

2.2 FINANCIAL REGULATORY PROVISIONS LIBERALIZING CLEARING SERVICES

When it comes to the specific provisions that spell out those financial infrastructure liberalizing mechanisms for central counterparties, it is worth examining their precise idiosyncrasy. EMIR and MiFIR's relevant provisions are put in context to extrapolate how the EU financial frameworks regulating the operation of clearinghouses aim to flesh out competition-flourishing principles. The forthcoming analysis demonstrates how these provisions can contribute to further integrating the EU market infrastructure and their efficacy is discussed next.

At the outset, EMIR Article 7 provides for the terms and conditions for accessing a central counterparty. Article 7 stipulates that a "CCP that has been authorised to clear OTC derivative contracts shall accept clearing such contracts on a non-discriminatory and transparent basis, regardless of the trading venue. A CCP may require that a trading venue comply with the operational and technical requirements established by the CCP, including the risk-management requirements."²²⁴ (emphasis added in the underlined text)

The rest of the Article prescribes the terms under which a CCP may refuse a formal request by a trading venue and elaborates on the role of national supervisory authorities ("NSAs") and ESMA throughout this process.²²⁵ In addition, NSAs have the capacity to "refuse access to the CCP following a formal request by the trading venue only where such

For a primer on the operational aspects associated with open access, see London Stock Exchange Group, Open Access Explained, available here: https://www.lseg.com/resources/open-access/open-access-explained.

²²⁴ EMIR, Article 7(1).

²²⁵ EMIR, Article 7(2)-(5).

access would threaten the smooth and orderly functioning of the markets or would adversely affect systemic risk."²²⁶ (emphasis added in the underlined text)

This provision is in line with the general principle of open access. It also strikes a fair balance between fostering the integration of the relevant markets, on the one hand, and preserving the integrity of the financial system, on the other. By providing access on a non-discriminatory and transparent basis to trading venues, the EU regulation seeks to level the playing field for central counterparties in this segment of financial infrastructure. Importantly, this provision aims to break up the silos existing in the industry as, unsurprisingly, most central counterparties are in the same corporate group as the major trading venues and stock exchanges. In particular, by prohibiting discriminatory terms in accessing CCPs EMIR envisages that trading venues irrespective of their ownership structure will start using the CCPs that are more efficient in clearing specific securities rather than simply transacting with their own vertically integrated clearinghouses. Indeed, such initiative is undoubtedly towards the further integration of financial market infrastructure.

Further, EMIR Article 8 sets out the framework under which the reverse scenario where central counterparties require access to a trading venue. The relevant parts in Article 8 read as follows: Paragraph 1 stipulates that "A trading venue shall provide trade feeds on a non-discriminatory and transparent basis to any CCP that has been authorised to clear OTC derivative contracts traded on that trading venue upon request by the CCP."; and paragraph 4 lays out that "Access of the CCP to the trading venue shall be granted only where such access would not require interoperability or threaten the smooth and orderly functioning of markets in particular due to liquidity fragmentation and the trading venue has put in place adequate mechanisms to prevent such fragmentation. ²²⁷ (emphasis added in the underlined text)

Similar to the previous provision, Article 8 seeks to increase competition in the EU financial market infrastructure by prescribing the rules for non-discriminatory and transparent access to exchanges' trading fees by central-counterparties. Despite the silos in the industry described above, financial regulation takes account of the potential perils that may arise in the absence of liquidity and could put at risk the financial system's stability and, subsequently, set out the appropriate carve-outs.

²²⁶ EMIR, Article 7(4).

²²⁷ EMIR, Article 8 (1), 8(4).

In a similar vein, MiFIR seeks to increase competition in the EU financial market infrastructure. MiFIR's recital 40 reads in the relevant parts: "Trading venues should be required to provide access including data feeds on a transparent and non-discriminatory basis to CCPs that wish to clear transactions executed on a trading venue. However, this should not necessitate the use of interoperability arrangements for clearing transactions in derivatives or create liquidity fragmentation in a way that would threaten the smooth and orderly functioning of markets." (emphasis added in the underlined text). The content of this part of the recital is closely aligned with the obligations stipulated in EMIR and has the same rationale of increasing competition in financial market infrastructure while not putting in jeopardy the stability and integrity of the financial system.

In addition, in another relevant part in recital 40 provides "where commercial and intellectual property rights relate to financial services related to derivative contracts, licenses should be available on proportionate, fair, reasonable and non-discriminatory terms. Therefore, access to licences of, and information relating to, benchmarks that are used to determine the value of financial instruments should be provided to CCPs and other trading venues on a proportionate, fair, reasonable and non-discriminatory basis and any license should be on reasonable commercial terms." (emphasis added in the underlined text). Again, these terms facilitate the liberalization of the underlying financial services and at the same time they discourage monopolization. Thus, they are procompetitive.

Further, "The removal of barriers and discriminatory practices is intended to increase competition for clearing and trading of financial instruments in order to lower investment and borrowing costs, eliminate inefficiencies and foster innovation in Union markets. The Commission should continue to closely monitor the evolution of post-trade infrastructure and should, where necessary, intervene in order to prevent competitive distortions from occurring in the internal market, in particular where the refusal of access to infrastructure or to benchmarks contravenes Articles 101 or 102 TFEU." (emphasis added in the underlined text)

MiFIR recital 40 makes crystal-clear that the European Union financial regulators seek to make competition flourish in the relevant EU markets by getting rid of trade barriers and discriminatory practices that could support monopolization. Ultimately, regulators purport to maximize efficiencies and promote innovation. The role of healthy competition in these

-

²²⁸ MiFIR, Recital 40.

markets is underscored and the relevant provisions of the Treaty on the Functioning of the European Union ("TFEU"), discussed in detail below, are expressly referred to in the text of the recital. Moreover, it is notable that MiFIR pinpoints specific type of conduct that is likely to fall afoul of antitrust rules; namely, refusals to access infrastructure or benchmarks in the financial market infrastructure are identified as potential anti-competitive triggers. Interestingly, this *Chapter*'s forthcoming analysis on competition concretely explains why refusals to supply constitute a valid concern for regulators in the financial services industry. Despite the application of competition rules, the dominance of certain market actors in financial infrastructure might increase the likelihood of potentially abusive conduct by dominant companies – pertinent to 102 TFEU.

With respect to the substantive MiFIR provisions, *Title VI* (that goes under the title "Non-discriminatory clearing access for financial instruments") puts forward specific provisions that purport to increase the liberalization of clearing services in the European internal market by imposing specific set of obligation on the financial infrastructure market participants. The relevant parts included in Articles 35 and 36 follow.

First, Article 35 (titled as "Non-discriminatory access to a CCP") reads at the relevant parts as follows: "Without prejudice to Article 7 of Regulation (EU) No 648/2012, a CCP shall accept to clear financial instruments on a <u>non-discriminatory</u> and <u>transparent</u> basis, including as regards collateral requirements and fees relating to access, regardless of the trading venue on which a transaction is executed. This in particular shall ensure that a trading venue has the right to <u>non-discriminatory treatment</u> of contracts traded on that trading venue in terms of: (a) collateral requirements and netting of economically equivalent contracts, where the inclusion of such contracts in the close-out and other netting procedures of a CCP based on the applicable insolvency law would not endanger the smooth and orderly functioning, the validity or enforceability of such procedures; and (b) cross-margining with correlated contracts cleared by the same CCP under a risk model that complies with Article 41 of Regulation (EU) No 648/2012."229 (emphasis added in the underlined text). These obligations reflect the regulatory considerations of opening up the silos in the EU financial market infrastructure industry. Through that competition in the relevant markets can result in concrete benefits for the market participants and that is why the text explicitly encounters the terms in contracts that might be prone to non-discriminatory treatment by clearinghouses.

²²⁹ EMIR, Article 35(1).

-

Given that the EU financial regulatory frameworks are closely interwoven, paragraphs 3 and 4 of MiFIR Article 35 mirror EMIR Article 7 provisions, which stipulate how the procedures for requests for access are to be carried out and the reasons why competent authorities can deny access to trading venues.

Second, Article 36 (under the title "Non-discriminatory access to a trading venue") stipulates at the relevant passages: "Without prejudice to Article 8 of Regulation (EU) No 648/2012, a trading venue shall provide trade feeds on a <u>nondiscriminatory</u> and <u>transparent</u> basis, including as regards fees related to access, upon request to any CCP authorised or recognised by Regulation (EU) No 648/2012 that wishes to clear transactions in financial instruments that are concluded on that trading venue. That requirement does not apply to any derivative contract that is already subject to the access obligations under Article 8 of Regulation (EU) No 648/2012."²³⁰ (emphasis added in the underlined text). Following the principles enshrined in the above-described provisions, the non-discriminatory and transparent access to trading venues is laid down for clearinghouses authorized in the European Union or the ones recognized through the equivalence procedure.

In a similar vein as in EMIR Article 8, the rest of the Article 36 elaborates on the provisions for the assessment of requests to access a trading venue by a CCP²³¹ and the conditions under which the competent authorities shall not grant a CCP access to a trading venue.²³²

Consequently, it is inferred that the EU financial regulatory regimes at issue have promulgated explicit provisions prescribing concrete obligations that meaningfully can contribute to the further integration of the European Union financial market infrastructure. Increasing competition in the financial services industry is a legitimate objective given the raise of cartel-like and monopolization scrutiny by the European Commission over the last decade – indicating that there is significant anti-competitive conduct in the financial industry. However, measuring the efficacy these policies and specifically how they translate in the actual liberalization of the financial services in question goes beyond the scope of this thesis and would require an empirical investigation. The remainder of this section on the EU financial

²³¹ EMIR, Article 36(2)-(3).

²³⁰ EMIR, Article 36(1).

²³² EMIR, Article 36(4).

regulation evaluates how the pro-competitive provisions described above score against the three indicators affecting completion inside the EU internal market and internationally.

2.3 COMPETITION ASSESSMENT OF THE FINANCIAL REGULATION

There is economic and legal literature on the competition landscape in clearing services markets in the EU and the US.²³³ However, the nature of the above-examined provisions has not been evaluated from the competition standpoint of this study. For the purposes of this inquiry, we use the indicators identified in the introduction – namely, (i) the competitive landscape in the EU, (ii) the global competitive landscape, (iii) the EU industry's international competitiveness – to determine to what extent the financial regulation at issue has a procompetitive footprint.

Naturally, with respect to the first parameter it is maintained that the EU regulation of financial market infrastructure has the potential to increase competition in the EU internal market as it lays out the rules that require clearinghouses and trading venues to break up their silos and start transacting with other entities on a non-discriminatory and transparent basis. Non-discrimination within this context of EU competition law does not necessarily require likeness determinations, as opposed to WTO law, and it purports to open markets that have been subjected to dominant players due to the special nature of financial market infrastructure. As a result, this regulatory development can only contribute to the further integration of the EU financial market infrastructure.

As to the second indicator, at the outset it shall be borne in mind that the EU – in its current configuration – is one of the important financial hubs at the global level. Therefore, its rules directly impact on the liberalization of clearing services due to the interconnectedness of financial markets. In addition, given that third-country clearinghouses or trading venues which are either established in the EU or they are recognized by the European Union to provide their services in the EU internal market, they benefit from the content of these provisions similar to

_

See, for example, Maurisz Szpringer & Wlodgimiersz Szpringer (2016). Law and Economics of Central Counterparties (CCP) – Selected Issues of Regulation and Competition Concerning Financial Market Infrastructure. European Business Law Review, 27(5), 587-603; Elias G. Kazarian, (2006). Integration of the securities market infrastructure in the European Union: policy and regulatory issues (No. 6-241). International Monetary Fund; and Shaofang Li, (2018). Competition in the clearing and settlement industry. In Financial Institutions in the Global Financial Crisis (pp. 105-167). Springer, Singapore; Dermot Turing (2016). Clearing and Settlement. Bloomsbury Publishing, Chapter 11, and for a commentary see George A. Papaconstantinou (2018), "Clearing & Settlement" by D Turing, Book review, European Law Review, vol. 42, no. 1.

the European ones. Thus, same as above the financial regulation in question here can only be pro-competitive for the global competition in financial services.

Finally, when it comes to whether EMIR and MiFIR provide a competitive advantage to the EU industry to increase its global edge it is inferred that this is not the case, at least as of the time of drafting this thesis.²³⁴ One caveat relates to EMIR 2.2, which is currently passing the EU legislative process and might pose some problems in this regard. These issues that can be already identified are briefly explored in the section dedicated on Brexit. *Section IV*, below. The next section delves into how the EU has scrutinized financial market infrastructure from an antitrust perspective and draws preliminary conclusions as to how this scrutiny has contributed to the liberalization of those markets.

3. THE APPLICATION OF COMPETITION LAW IN THE EU FINANCIAL MARKET INFRASTRUCTURE: TOWARDS FURTHER LIBERALIZATION IN FINANCIAL SERVICES

3.1 Introductory Remarks on Competition in Financial Services

Financial services sectors and the industry has, traditionally, been consolidated due to the required economies of scope and scale in order to achieve the projected margins. However, by no means are financial services exempted from the application of competition law and policy. When it comes to financial market infrastructure that is even more the case as most institutions used to be run by States not that long ago. As explained, this liberalization is realized through regulatory reforms at the EU level alongside with the application of competition law. The forthcoming analysis investigates the extent to which the enforcement of antitrust law and merger control have contributed to liberalizing the EU internal market for financial market infrastructure, namely clearing and settlement together with trading; the latter is capture by the scope of this *Chapter* due to the market structure of the industry and the prominence of antitrust enforcement in encountering anti-competitive conduct in the trading sector and, therefore, contributing to the liberalization of financial market infrastructure in the EU. To this end, we seek to assess the efficacy of competition law in integrating markets and, further, attaining the benefits of such liberalization – without disregarding the importance of financial stability consideration along the way.

-

The thesis was submitted on 14 January 2020.

3.2 EU ANTITRUST LAW (101 AND 102 TFEU) SCRUTINIZING FINANCIAL MARKET INFRASTRUCTURE

Due to State participation and the prominent role of EU Member States in the financial market infrastructure until the emergence of the Investment Services Directive ("ISD"), ²³⁵ competition law did not use to be as invasive in these market as in others until recently. However, over the last decade competition enforcers have started becoming more and more present in assessing the consistency of financial services markets, in general, and financial market infrastructure, in particular, with EU antitrust law. Indeed, important literature has been produced recently discussing competition law in financial services more broadly. ²³⁶ Hereby, the writer encounters the antitrust cases that serve this *Chapter*'s analytical framework and does not exhaustively refer to all competition in financial services cases.

In particular, the following analysis focuses on competition cases pertinent to financial market infrastructure – defined as including the financial services relating to (i) trading, (ii) clearing, and (iii) settlement of financial instruments – in order to draw useful conclusions about how competition/antitrust law contributes to the integration of clearing services in the European Union.

This *Section*'s objective is to bring into the spotlight the relevant financial services cases that have been under the scrutiny of EU antitrust law. Accordingly, the cases where financial market infrastructure has been assessed for potential violations of Articles 101 TFEU, and 102 TFEU are this study's focal point. The discussion on concentration control in financial market infrastructure is reserved for the next sub-section.

Council Directive of 10 May 1993 on investment services in the securities field (93/22/EEC) was the predecessor of MiFID and was the first EU law attempting to liberalize financial market infrastructure in the internal market through harmonization. For relevant literature, see Guido Ferrarini, (Ed.). (1998), European Securities Markets: the investment services directive and beyond. Kluwer Law International BV; Mannin Gilbert Warren III, (1994), The European Union's Investment Services Directive. U. Pa. j. Int'l Bus. L., vol. 15, p. 181; and Norman S. Poser, (1992), Automation of Securities Markets and the European Community's Proposed Investment Services Directive. Law & Contemp. Probs., vol. 55, p. 29.

See, inter alia, Andrea Lista, (2013). EU competition law and the financial services sector. Informa Law from Routledge; Damien Gerard, (2008). Managing the financial crisis in Europe: Why competition law is part of the solution, not of the problem. Global Competition Review, December; Federico Ferretti, (2014). EU competition law, the consumer interest and data protection: The exchange of consumer information in the retail financial sector. Springer; Michael Reynolds, Sarah Macrory, & Michelle Chowdhury (2009). EU competition policy in the financial crisis: extraordinary measures. Fordham Int'l LJ, 33, 1670; and Ilias Kapsis. (2012). Competition law and policy for the EU banking sector in a period of increased economic uncertainty. International Journal of Law and Management, 54(4), 284-301.

The scope of Article 101 TFEU²³⁷ covers anti-competitive agreements between economic market participants that restrict competition in the relevant markets. Examples of such conduct for the purposes of financial market infrastructure could include price-fixing for the provision of specific trading. Clearing or settlement services of particular securities. Next, as to Article 102 TFEU²³⁸ (also referred to as 'monopolization' in the U.S., regulated under the Sherman Act 1890 §2), financial market infrastructure entities can fall within the ambit of EU antitrust rules when there is evidence of an abuse of dominant position. Conduct by a dominant entity that can be characterized as anti-competitive includes predatory pricing, exclusivity rebates, and refusals to supply as long as they result in negative effects in the relevant markets.²³⁹

- 3. The provisions of paragraph 1 may, however, be declared inapplicable in the case of: any agreement or category of agreements between undertakings, any decision or category of decisions by associations of undertakings, any concerted practice or category of concerted practices, which contributes to improving the production or distribution of goods or to promoting technical or economic progress, while allowing consumers a fair share of the resulting benefit, and which does not:
- (a) impose on the undertakings concerned restrictions which are not indispensable to the attainment of these objectives;
- (b) afford such undertakings the possibility of eliminating competition in respect of a substantial part of the products in question.

Article 101 TFEU reads as follows: 1. The following shall be prohibited as incompatible with the internal market: all agreements between undertakings, decisions by associations of undertakings and concerted practices which may affect trade between Member States and which have as their object or effect the prevention, restriction or distortion of competition within the internal market, and in particular those which:

⁽a) directly or indirectly fix purchase or selling prices or any other trading conditions;

⁽b) limit or control production, markets, technical development, or investment;

⁽c) share markets or sources of supply;

⁽d) apply dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage;

⁽e) make the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts. 2. Any agreements or decisions prohibited pursuant to this Article shall be automatically void.

Article 102 TFEU reads as follows: Any abuse by one or more undertakings of a dominant position within the internal market or in a substantial part of it shall be prohibited as incompatible with the internal market in so far as it may affect trade between Member States. Such abuse may, in particular, consist in:

⁽a) directly or indirectly imposing unfair purchase or selling prices or other unfair trading conditions;

⁽b) limiting production, markets or technical development to the prejudice of consumers;

⁽c) applying dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage;

⁽d) making the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts.

The 'effects-based' analysis of 102 TFEU is currently a hot topic for competition enforcing agencies and academic literature. For the relevant debates, see, for example, Lars Hendrik Röller, & Olivier Stehmann, (2006). The year 2005 at DG competition: The trend towards a more effects-based approach. Review of Industrial Organization, 29(4), 281-304; Paul Nihoul, (2014). The ruling of the General Court in Intel: towards the end of an effect-based approach in European competition law?, Journal of European Competition Law & Practice, 5(8), 521-530; Giorgio Monti, (2010). Article 82 EC: what future for the effects-based

Traditionally, the objectives behind antitrust law are the following: to preserve the process of competition for the benefit of consumers (also known as consumer welfare²⁴⁰), ensuring that there are strong incentives in place for businesses to operate efficiently, maintaining prices down, and keeping the quality of the products or services as high as possible.²⁴¹ Importantly, the objective functions of competition law include among others (i) consumer protection from companies' potentially anti-competitive conduct, (ii) the redistribution of wealth through the promotion of economic equity rather than economic efficiency,²⁴² (iii) the protection of competitors, and, last but not least, (iv) the integration of the single market.²⁴³ The following subsections pinpoint the relevant cases pertinent to financial market infrastructure and discuss the potential anticompetitive triggers that would be able to jeopardize the integration of the services in question in the EU internal market.

3.2.1 CLEARSTREAM: A CASE OF DOMINANCE IMPEDING COMPETITION IN FINANCIAL MARKET INFRASTRUCTURE

In September 2009 the General Court – called Court of First Instance at the time – dismissed the action for annulment²⁴⁴ brought by Clearstream Banking AG (also referred to as Clearstream Banking Frankfurt) and Clearstream International SA (called together as "Clearstream" for convenience when there is no need for separation) against the 2 June 2004 Commission Decision in the *Clearstream* case. The Commission Decision had found that Clearstream infringed Article 102 TFEU by (i) *refusing to supply certain clearing and settlement services* to Euroclear Bank SA, one of its customers, and by (ii) *applying discriminatory prices* to Euroclear Bank SA. The following paragraphs delve into analyzing the Commission Decision and the General Court's ruling in order to delineate which are the

118

approach?. *Journal of European Competition Law & Practice*, *1*(1), 2-11; Alison Jones, (2010). The Journey toward an Effects-Based Approach under Article 101 TFEU—The Case of Hardcore Restraints. *The Antitrust Bulletin*, *55*(4), 783-818; and Wouter PJ Wils, (2014). The Judgment of the EU General Court in Intel and the so-called more economic approach to abuse of dominance. *World Competition*, *37*(4), 405-434.

²⁴⁰ For discussion, see, *inter alia*, Joseph Farrell & Michael L. Katz (2006). The economics of welfare standards in antitrust, 2 Competition Policy International 15.

See Richard Whish & David Bailey (2018). Competition law. Oxford University Press, USA, p. 3-15. For a thought-provoking discussion, see William E. Kovacic, & Carl Shapiro (2000). Antitrust policy: A century of economic and legal thinking. Journal of Economic perspectives, 14(1), 43-60.

Okeoghene Odudu (2008). The Distributional Consequences of Antitrust in Marsden, P. (Ed.). (2008). Handbook of research in trans-Atlantic antitrust. Edward Elgar Publishing, ch. 23.

Notably, the European Commissioner for competition policy, Margrethe Vestager, explained that "The founding fathers of Europe understood that there would be no genuine integration without a Single Market – and no functioning Single Market without a strong competition policy enforced by a central competition authority" at the 'The values of competition policy' speech of 13 October 2015.

²⁴⁴ Based on Article 263 TFEU.

anticompetitive triggers identified in the conduct of Clearstream and to underscore how this antitrust scrutiny constitutes a lesson for all financial market infrastructure providers in Europe.

(a) The Commission Decision in Case COMP/38.096

The Commission Decision²⁴⁵ found that Clearstream Banking AG had a dominant position in the market for the provision of 'primary' clearing and settlement services for securities issued pursuant to German law to central securities depositories ("CSDs") in other EU Member States and to international central securities depositories ("ICSDs").²⁴⁶ The Commission noted that Clearstream had a dominant position on the relevant market because the vast majority of financial instruments issued under German legislation were kept in collective safe custody, and only a *Wertpapiersammelbank* was authorized to keep securities in custody within Germany. Interestingly, Clearstream was the only *Wertpapiersammelbank* in Germany and thus its dominant position was established.

As to specific abuses that the Commission found against Clearstream, its behavior consisted of: (i) "refusing to supply primary clearing and settlement services for registered shares by denying direct access to CASCADE RS, and discriminating against EB in relation to the supply of those services. The refusal to supply and the unjustified discrimination in relation to direct access to CASCADE RS are not two separate infringements, but rather two manifestations of the same behavior, as the unjustified discrimination exists because CBF refused to supply EB with the same or similar services it was supplying to other comparable customers"; and (ii) "applying discriminatory prices for the primary clearing and settlement services compared to such services it was providing to other comparable customers".²⁴⁷

With respect to the first violation, it is settled case law of EU courts that undertakings holding a dominant position bear a special responsibility and, as such, in certain occasions refusals to supply (either in the form of refusals to start supplying or withdrawals to supply) might infringe Article 102 TFEU.²⁴⁸ For completeness, the U.S. case law differs significantly

²⁴⁵ Commission Decision of 2 June 2004, Case COMP/38.096 – Clearstream (Clearing and Settlement).

See paras. (205)-(215) of the Commission Decision. As to the business that ICSDs engage in, it relates to the clearing and settlement of Eurobonds mainly in international commercial environments. At the time, there were two ICSDs in the European Union: Euroclear Bank, based in Belgium, and Clearstream Banking Luxembourg. ICSDs also provide other auxiliary services, such as intermediary services for equities, see para. (19) of the Commission Decision.

See para. (216) of the Commission Decision.

See for example, the judgements in Cases C-147/97 and C-148/97, Deutsche Post AG vs. GZS and Citicorp Kartenservice GmbH [2000] ECR I-825, paras. 60-61; *United Brands* case, para. 182.

on this score.²⁴⁹ Notably, the Commission held that as Clearstream is a "de facto monopolist" in the provision of primary clearing and settlement services in the market at issue, no other valid alternatives were available for Euroclear due to the high barriers to entry that amounted to making Clearstream the only option to supply those services.²⁵⁰ In addition, Clearstream's refusal to provide services was at the expense of innovation and competition in the downstream market and, subsequently, to the detriment of the consumers of the EU internal market.

(b) The Court's judgement in Case T-301/04

Notably, the Court judgement confirmed both the Commission's delineation of the market and the existence of abusive conduct against Euroclear Bank SA, a direct competitor to Clearstream Luxembourg SA. Concerning the definition of the relevant market in services of the case at issue, the Commission and Clearstream had opposing views as to what the appropriate definition should have been. On the one hand, the Commission claimed that a distinction between primary and secondary post-transaction securities processing services was crucial because of the particular market structure and the role of intermediaries vis-à-vis financial market infrastructure institutions. On the other hand, Clearstream contested this definition and, accordingly, the dominance held by it.

In specific, Clearstream considered that the Commission's definition was artificial and underlined that "post-transaction processing is carried out only once and for the benefit of the parties to the transaction alone", as intermediary depositories are not a part of this relationship.²⁵¹ Clearstream maintained that there was only one market in clearing and

-

Interestingly, one of the most unsettled domains of U.S. antitrust law pertains to the duty of a monopolist to deal with its competitors. Generally, firms have no duty to deal with their competitors. In fact, imposing an obligation on a firm to carry out business with its rivals is not consonant with other antitrust rules that discourage agreements between competitors. For refusals to supply, case law in the U.S. acknowledged that they are in the clear as long as there is a legitimate business reason behind. The U.S. Supreme Court in *Aspen Skiing Company v. Aspen Highlands Skiing Corporation* came up with the concept of "essential facilities" but it did not decide the case on the base of this doctrine. Perhaps more interestingly, the Supreme Court in the 2004 case of *Verizon Communications, Inc. v, Law Offices of Curtis V. Trinko, LLP* reaffirmed the general rule that businesses can refuse to deal with their competitors and made clear that it was not going to use the abovementioned doctrine as Courts are not supposed to become "central planners" of the economy. For literature on the essential facilities doctrine in the U.S., see, for example, Robert Pitofsky, Donna Patterson, & Jonathan Hooks (2002). The essential facilities doctrine under us antitrust law. *Antitrust Law Journal*, 70, 443.

²⁵⁰ See para. (224) of the Commission Decision.

Judgement of the Court of First Instance of 9 September 2009 in Case T-301/04 Clearstream Banking AG and Clearstream International SA v Commission, para. 36.

settlement services for German securities on which Clearstream is in competition with Euroclear for the same final customers.²⁵²

On this score, the Court of First Instance acknowledged, at the outset, that the definition of product markets involved complex economic evaluations on the part of the European Commission and it is "subject only to limited review by the Community judicature". The Court rejected Clearstream's argument that there is a general market in clearing and settlement services, in which those seeking services are the parties to the transaction (including the intermediary depositories when they act on their own behalf) because by acting on behalf of parties to the transaction, the intermediary depositories are carrying on an independent business of providing services. 254

As to the abuse, the Court's judgement addressed Clearstream's discriminatory behavior against Euroclear in comparison with other clients regarding refusal to supply services in the form of delaying the process of connecting Euroclear to Clearstream's data processing system, and Clearstream charging Euroclear higher fees than it charged other clients for equivalent clearing and settlement services.²⁵⁵

With respect to Clearstream's refusal to supply, the arguments put forward by the applicant before the Court related to the complexity of the connection between Euroclear and Clearstream,²⁵⁶ and technical deficiencies at the end of Euroclear²⁵⁷ that resulted in delaying the process of connecting the latter to the Clearstream's data processing system. In its judgement, the Court of First Instance verified that Clearstream abused its dominant position by not offering Euroclear access to the data processing services it had requested for over two years, while it provided access to other companies only within a few months.²⁵⁸ It also reiterated that the concept of abuse is an objective concept pertinent to the behavior of undertakings enjoying dominant position.²⁵⁹

²⁵² Ibid, para. 38.

²⁵³ Ibid, para. 47.

²⁵⁴ Ibid, para. 54. See to that effect, British Airways v Commission, para. 93.

²⁵⁵ Ibid, para. 64.

²⁵⁶ Ibid, para. 80.

²⁵⁷ Ibid, para. 81.

²⁵⁸ Ibid, paras. 155-158.

See, for example, Hoffmann-la Roche v Commission para 91; and case T-203/01 Michelin v Commission, para 54.

Regarding the application of discriminatory pricing at the expense of Euroclear, Clearstream alleged that the Commission's decision had not taken into account a number of factors. Namely, that the services requested by Euroclear Bank were significantly different (including different transaction volumes, varying ranges of standardization and automation, different insurance policies against civil liability and night services) vis-à-vis the ones offered to Clearstream Banking Luxembourg SA, irrespective of the fact that they were both ICSDs.²⁶⁰ Discriminatory pricing by a dominant undertaking is disallowed by subparagraph (c) of Article 102 TFEU. Importantly, in accordance with case law, dominant undertakings may not apply artificial price differences, such as to place its customers at a disadvantage and to distort competition.²⁶¹

On the merits of the case, the Court held that the application to a trading partner of different prices for equivalent services – continuously over a period of five years – and by an undertaking having a *de facto* monopoly on the upstream market could not fail to cause that partner a competitive disadvantage and rejected Clearstream's argument. The Court dismissed Clearstream's arguments due to the higher per transaction fees charged to Euroclear in comparison to equivalent companies.²⁶²

For those reasons, Clearstream's behavior amounted to abusive behavior at odds with 102 TFEU. This case makes evident that abusive conduct in the form of discriminatory pricing and refusal to supply in financial market infrastructure is captured by EU antitrust law. Perhaps more importantly, this ruling sets a good precedent that underscores that the EU internal market may not permit anti-competitive conduct that would impede the integration prospects of its financial markets. Thus, it is held that the *Clearstream* case is a good example of how antitrust law contributes to the liberalization of financial markets by fighting against monopolization in specific market segments.

Judgement of the Court of First Instance of 9 September 2009 in Case T-301/04 Clearstream Banking AG and Clearstream International SA v Commission, paras. 160-167.

²⁶¹ For the relevant jurisprudence, see Case T-83/91 Tetra Pak v Commission [1994] ECR II-755, para. 160; and Deutsche Bahn v Commission, para. 78.

Judgement of the Court of First Instance of 9 September 2009 in Case T-301/04 Clearstream Banking AG and Clearstream International SA v Commission, paras 194-195.

3.2.2 THE CDS CASES: THE COMMISSION INVESTIGATIONS RELATING TO CDS CLEARING AND INFORMATION MARKET THAT, FINALLY, DID NOT HIT THE TARGET

The CDS Clearing investigation was officially announced in April 2011.²⁶³ The Commission was investigating whether the conditions of certain agreements concluded between ICE's CDS clearinghouse, ICE Clear, and nine banks prevented other clearing houses from competing in the relevant market or was discriminatory against other financial institutions. In the absence of sufficient evidence to substantiate an infringement, the Commission terminated its proceedings against ICE and the banks in December 2015.

Similarly, in April 2011 the Commission also initiated an investigation into the CDS Information market, which related to an alleged concerted refusal by 16 banks to offer CDS price data to information service providers other than Markit.²⁶⁴ Interestingly, by July 2013 the Commission's theory of harm was modified claiming that the banks, Markit and ISDA foreclosed entry to the market for exchange-traded unfunded credit derivatives. The Commission issued a statement of objections but, again, because of lack of evidence the proceedings were closed,²⁶⁵ similar to the CDS Clearing case. In 2016, Markit and ISDA offered commitments aiming to facilitate access to their respective intellectual property and data for exchange trading purposes that the Commission accepted.²⁶⁶

3.2.3 THE MANIPULATION OF INTEREST RATE DERIVATIVES: ANTI-COMPETITIVE TRADING UNDER THE EU COMPETITION ENFORCER'S SCRUTINY

The Commission's interest rate derivatives ("IRDs") investigations were driven by immunity applications and were announced over a 14-month period; Euro IRDs were announced in October 2011, Japanese Yen IRDs were announced in March 2012, and Swiss Franc IRDs were announced in February 2013. These three investigations have led to the imposition of fines, in the majority of cases according to the Commission's settlement procedure.²⁶⁷

As regards the Euro IRDs, in December 2013, in the aftermath of settlement discussions, the Commission imposed fines amounting to 824 million euros against four banks

264 =

²⁶³ See Case COMP/39.730.

²⁶⁴ See Case COMP/39.745.

See Commission Press Release of 4 December 2015, available here: https://europa.eu/rapid/press-release MEX-15-6254 en.htm.

See Commission Press Release of 20 July 2016, available here: https://europa.eu/rapid/press-release_IP-16-2586 en.htm.

²⁶⁷ See Article 10a of the Commission Regulation (EC) No. 773/2004.

for discussions taking place among traders of those banks about their Euro Interbank Offered Rates ("EURIBOR") submissions and, more broadly, their trading and pricing strategies.²⁶⁸ Notably, Société General in February 2014 lodged an appeal against the calculation of its settlement fine²⁶⁹ but it, subsequently, withdrew its appeal once the Commission dropped the fine to 227.7 million euros, as the result of revised sales data. Three other banks did not settle and in December 2016, the Commission issued a decision imposing fines of 485 million euros.²⁷⁰ Those three banks have since appealed the Commission's decision before the EU General Court.²⁷¹

In respect of the Japanese Yen IRDs, during December 2013 and following discussions about settlement the Commission fined five banks and one broker firm the amount of 670 million euros for discussions among traders of those financial institutions pertinent to their Japanese Yen London Interbank Offered Rate ("LIBOR") submissions and trading patterns.²⁷² In contrast with the abovementioned institutions, ICAP did not settle with the Commission and it was fined 15 million euros in February 2015.²⁷³ Subsequently, ICAP appealed the Commission's decision to the General Court that in November 2017 annuled part of the Commission's decision against ICAP with respect to the extent of its participation in the cartel.²⁷⁴ The Commission has appealed this General Court judgement to the Court of Justice of the European Union, which is currently pending.²⁷⁵

As to the Swiss Franc IRDs, in October 2014, once settlement agreements were reached the Commission imposed fines totaling 94 million euros against four financial institutions. The grounds for the fines were that they (i) concluded agreements to quote wider bid-offer spreads to the market on certain types of Swiss Franc IRDs, while keeping narrower bid-offer spreads

See Case AT.39914 Euro Interest Rate Derivatives. The four charged banks are Barclays, Deutsche Bank, Royal Bank of Scotland, and Société Generale.

See the Commission press Release of 7 December 2016, available here: https://europa.eu/rapid/press-release_IP-16-4304_en.htm.

²⁶⁹ See Case T-98/14, Société Generale v Commission.

For the appeals against the Commission Decision lodged by HSBC, JPMorgan Chase, and Credit Agricole, see HSBC v Commission, T-105/17, JPMorgan Chase v Commission, T-106/17, and Credit Agricole v Commission, T-113/17, respectively.

²⁷² See Case AT.39861 *Yen Interest Rate Derivatives*. The financial institutions under investigation were UBS, Royal Bank of Scotland, Deutsche Bank, JP Morgan, Citibank and broker RP Martin.

²⁷³ See Press Release IP/15/4104, available here: https://europa.eu/rapid/press-release IP-15-4104 en.htm.

²⁷⁴ See Case T-180/15, ICAP v Commission, judgment of 10 November 2017.

See the Commission appeal in Case C-39/18 P, ICAP V Commission, published in the Official Journal of the European Union C 142/26 on 23 April 2018.

between themselves, and (ii) exchanged sensitive intelligence regarding specific trading positions and intended pricing strategies for future Swiss Franc LIBOR submissions.²⁷⁶

These antitrust investigations into collusive behavior in the trading of financial instruments reveals that the enforcement of competition law does scrutinize and sanction the potentially anti-competitive conduct of entities participating in financial market infrastructure. The impact of the EU competition scrutiny in the financial infrastructure field is evaluated *infra* in relation to its prospects of furthering the integration in the relevant markets.

3.2.4 PARALLEL ANTITRUST AND FINANCIAL REGULATORY INVESTIGATIONS AND THE IMPORTANCE OF PRIVATE ENFORCEMENT

In parallel to the general proliferation of competition scrutiny in financial services cases by the Commission, it is worth mentioning that investigations in the finance sector often involve concurrent investigations carried out by financial regulators. The raison d'être behind this is that the conduct under investigation that might be found in breach of EU competition laws might be most commonly also in violation of specific sets of financial regulations. For the sake of clarity, a few examples that illustrate how antitrust investigations are coupled with the procedures lodged by financial regulators follow.

The LIBOR scandal in addition to the antitrust leg had probes by financial regulators around the globe, such as the Department of Justice ("DOJ"), the US CFTC and the UK Financial Conduct Authority ("FCA"). has coupled its efforts in addressing manipulation by various financial institutions of benchmarks used in trading with regulatory measures. In particular, on 16 April 2014 Market Abuse Regulation ("MAR") (No 596/2014) and Market Abuse Directive ("MAD") (2014/57/EU) on criminal sanctions were adopted.²⁷⁷ Further, in June 2016 a Regulation on indices used as benchmarks in securities and financial contracts or

²

See Comp/39924 Swiss Franc Interest Rate Derivatives (CHF LIBOR), and Comp/39924 Swiss Franc Interest Rate Derivatives (Bid Ask Spread Infringement), decisions of 21 October 2014. The banks in question were RBS, JP Morgan, Credit Suisse, and UBS. See also the Commission Press Release IP/15/4104, available here: https://europa.eu/rapid/press-release IP-15-4104 en.htm.

For the legislative texts, see Directive 2014/57/EU of the European Parliament and of the Council of 16 April 2014 on criminal sanctions for market abuse (market abuse directive) L 173/179, and Regulation (EU) No 596/2014 of the European Parliament and of the Council of 16 April 2014 on market abuse (market abuse regulation L 173/1. For literature on the subject of market abuse more broadly, see, for example, Barry Rider, Kern Alexander, Stuart Bazley, & Jeffrey Bryant, (2016). *Market abuse and insider dealing*. Bloomsbury Publishing; Jesper Lau Hansen, (2017). Market Abuse Case Law–Where Do We Stand With MAR?. *European Company and Financial Law Review*, 14(2), 367-390; and Khurram Shahzad, & Gerrard Mertens, (2017). The European Market Abuse Directive: Has it Worked?. *Journal of International Financial Management & Accounting*, 28(1), 27-69.

measuring the performance of investment funds was adopted (No 2016/1011).²⁷⁸ Notably, the Benchmarks Regulation qualifies as a capital markets infringement, the manipulation of benchmarks, such as EURIBOR, and bolsters the investigative and sanctioning powers of financial regulators.²⁷⁹

For the sake of completeness, to gain a comprehensive understanding of the whole picture surrounding how antitrust in financial services works, it is necessary to bear in mind the role of private enforcement. In the advent of the Damages Directive, ²⁸⁰ private actions for damages have significantly increased for financial services case. As the result of the IRD investigation's fines imposed by the Commission, private claims have started emerging. In January 2017, the US FDIC lodged a stand-alone claim in the United Kingdom accusing the traders of a number of banks of colluding and misrepresenting their LIBOR submissions. ²⁸¹

3.2.5 COMPETITION ASSESSMENT OF THE ANTITRUST CASES IN FINANCIAL MARKET INFRASTRUCTURE

On the basis of the first indicator for evaluating the pro-competitive elements of the EU integration model – the competitive landscape in the EU – the preceding analysis makes clear that EU antitrust law actively pursues the liberalization of the European financial market infrastructure by encountering monopolization. As discussed, companies that either have the tendency to abuse their dominant position in market segments of financial infrastructure (i.e. the case of Clearstream) or they exchange sensitive information carrying out cartel-like behavior (i.e. the banks in the EURIBOR and LIBOR cases) are scrutinized by the European Commission in order to avoid negative effects that can harm competition, consumers and

See Regulation (EU) 2016/1011 of the European Parliament and of the Council of 8 June 2016 on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds L 171/1. For general academic literature on benchmarks, see Gina-Gail S.Fletcher, (2016). Benchmark regulation. *Iowa L. Rev.*, 102, 1929.

For instance, the French Autorité de la Concurrence imposed fines of 384.9 million euros on French banks that reached an agreement concerning interbank fees for processing cheques in the wake of the transition to a new digital clearing system. In a similar vein, the UK national competent authority found two UK banks had unlawfully exchanged confidential pricing information with respect to commercial loans.

Council Directive 2014/104/EU of 26 November 2014. By now, all the EU Member States have implemented the Damages Directive. For literature reflecting on the Directive in competition law literature see, for instance, Sebastian Peyer, (2016). Compensation and the Damages Directive. European Competition Journal, vol. 12, no. 1, pp. 87-112; Anna Piszcz, (2015). Piecemeal Harmonisation Through the Damages Directive? Remarks on What Received Too Little Attention in Relation to Private Enforcement of EU Competition Law. Yearbook of Antitrust and Regulatory Studies (YARS), vol. 8, no. 12, pp. 79-98; Niamh Dunne, (2015). Courage and compromise: the Directive on Antitrust Damages. European Law Review, 2015, no. 4; Miriam Driessen-Reilly, (2015). Private damages in EU competition law and arbitration: a changing landscape. Arbitration International, 31(4), 567-587; and Frank P. Maier-Rigaud, (2014). Toward a European Directive on damages actions. Journal of Competition Law and Economics, vol. 10 no. 2, pp. 341-360.

²⁸¹ See Particulars of Claim in Case FL-2017-000002, FDIC v Barclays and others, filed 7 July 2017.

innovation. Thus, there is no doubt that antitrust law contributes to further liberalizing the financial market infrastructure of the European Union.

As regards the second criterion on how EU antitrust impacts on the global competitive field, in a similar vein, it is maintained that once anti-competitive behaviors at the EU level are sanctioned by EU competition watchdogs, then international competition is more likely to flourish thanks to such interventions. In a counterfactual scenario under which European monopolists' conduct was not scrutinized and fined by the European Commission, it is obvious that international competition in the relevant markets would be foreclosed and, therefore, with higher barriers to entry fewer (if not none) international competitors would be willing to compete on their merits. Consequently, international competition in financial market infrastructure is fostered by the application of EU antitrust law.

With respect to the extent to which the competitiveness of the EU industry is affected by how EU antitrust law enforcement occurs, it suffices to say that in the above-stated cases brought by the European Commission the companies that were scrutinized were in their majority either EU monopolists (i.e. Clearstream) or European banks or subsidiaries of third country financial institutions. Thus, the international competitiveness of the EU industry is not by any means supported by way EU antitrust law has been applied and the above-mentioned examples show why.

To conclude, this analysis has shown how EU antitrust law has contributed to the liberalization of particular market segments of the EU internal financial market infrastructure.

3.3 EU MERGER CONTROL: A MECHANISM PROHIBITING MONOPOLISTIC CONCENTRATION STRUCTURES IN FINANCIAL MARKET INFRASTRUCTURE

As the liberalization of financial infrastructure in the EU started increasing as a response to regulatory frameworks' mandates, which sought to turn the EU internal market into a truly liberalized area for trading financial services, and the traditionally monopolistic financial market infrastructure started becoming subject to competitive market forces - concentration ventures came at play. The rationale behind merger control is to prevent concentration structures that could be capable of independently making market decisions without bearing in mind the competitors' business models and pricing strategies – and ultimately amounting to monopoly powers or, more generally, ensure rivalry in the market will not be upset because of a merger. It should be underlined that merger control is a forward

looking exercise, hence there is uncertainty factored in any concentration control investigation by competition authorities. To that end, EU concentration control²⁸² acts in favor of preserving markets' competitive forces when there are valid concerns that a proposed merger would lead to monopolistic outcomes for specific market segments.

In the same vein, the European Commission evaluates financial infrastructure mergers in relation to their potential anti-competitive effects. It is crucial for this thesis to investigate how the EU competition watchdog argues in favor of maintaining competition in segments of the European Economic Area ("EEA") financial markets in order to understand how the liberalization of financial services in the EU is promoted. Importantly, the forces of financial regulation in parallel with the mechanics of concentration control foster the liberalization of financial infrastructure in the EU. The forthcoming analysis demonstrates how the EU regime on merger control has promoted the liberalization of financial infrastructure by not clearing two proposed mega mergers for the European financial services industry.

As case studies, Section III.3.1 focusses on the New York Stock Exchange ("NYSE") Euronext and Deutsche Börse ("DB") proposed deal that the Commission prohibited in 2012, and Section III.3.2 analyzes the London Stock Exchange ("LSE") and DB proposed merger that was blocked by the Commission in 2017, in the aftermath of the Brexit referendum.

3.3.1 NYSE EURONEXT/DB FAILED MERGER: A POWERHOUSE IN TRADING AND CLEARING BENCHMARK EXCHANGE-TRADED DERIVATIVES THAT NEVER HAPPENED

A sensitive balance that policymakers have to strike relates to preserving competition in the EEA without, at the same time, jeopardizing the European Union industry's global competitiveness. That is precisely the point where the interface between antitrust and international trade law lies. On the one hand, European markets should not be foreclosed by the anti-competitive conduct of one²⁸³ or more than one²⁸⁴ economic actors or potential mergers²⁸⁵ because companies have to compete on their merits for competition to flourish; efficiency arguments are factored in all the above assessments carried out by competition

128

See Council Regulation (EC) No 139/2004 of 20 January 2004 on the control of concentrations between undertakings (the EC Merger Regulation) (Text with EEA relevance), referred to as EU merger control or EU concentration control Regulation.

²⁸³ In the form of unilateral abusive behavior by a dominant company at odds with Article 102 TFEU, as discussed above.

²⁸⁴ In the form of competition violations of Article 101 TFEU.

²⁸⁵ Merger control is the focal point of the forthcoming analysis.

authorities. On the other hand, to preserve the Union's interest and for the EU's economy to grow it is essential that the European industry is able to compete head to head with the other global players and as such, it should be sufficiently competitive.

There are trade defense instruments that cater for the latter when it comes to trade in goods. However, for trade in services, and specifically financial services, it is regulators – together with competition authorities – that have the first and the last word on how the services in question are to be supplied in and out of their respective jurisdictions, assuming that the trade disciplines and commitments discussed in *Chapter III* and *Chapter III* are respected. Notably, the divergence in the economic models of global powers' (notably the US and China) brings into the spotlight that the relationship between global competition and international trade needs to be reevaluated in order to achieve predictability, fairness, and certainty as to how the terms of trade are determined for global players active in the major markets.

Following this, to preserve competition in the on-exchange derivatives clearing activities the Commission in February 2012 did not clear the proposed merger between DB and NYSE Euronext.²⁸⁷ In the Commission's words, the merger would have led to a "quasi-monopoly in the area of European financial derivatives traded globally on exchanges."²⁸⁸ The combined control of European derivatives traded on exchanges – as opposed to the ones traded OTC - of the two stock exchanges would have exceeded 90% of the global trade in these financial instruments. The Commission decision identified in its Decision the differences between OTC and exchange traded derivatives ("ETDs").²⁸⁹ Importantly, the Commission

Nevertheless, these trade defense instruments are applicable only on trade in goods and their scope does not include trade in services or intellectual property. For general literature on trade remedies see, for example, Chad P. Bown, (2009). The global resort to antidumping, safeguards, and other trade remedies amidst the economic crisis. The World Bank; Alan O. Sykes, (2007). International trade: trade remedies. Research Handbook in International Economic Law, 62-112; Bernard Hoekman & Petros C. Mavroidis (1996). Dumping, antidumping and antitrust. Journal of World Trade, 30(1), 27-52; and Kyle Bagwell, George A. Bermann, & Petros C. Mavroidis (Eds.). (2009). Law and economics of contingent protection in international trade. Cambridge University Press.

Financial Times, Alex Barker, D Börse and NYSE challenge to block merger, 30 January 2012. Available here: https://www.ft.com/content/d3caa948-4b41-11e1-88a3-00144feabdc0.

European Commission – Press Release, 01 February 2012, Mergers: Commission blocks proposed merger between Deutsche Börse and NYSE Euronext, available here http://europa.eu/rapid/press-release_IP-12-94 en.htm.

See Case No COMP/M.6166 - DEUTSCHE BÖRSE / NYSE EURONEXT, Commission Decision of 1.2.2012 declaring a concentration to be incompatible with the internal market and the functioning of the EEA Agreement, paras. 328, 543. Most importantly, ETDs and OTC derivatives are destined for different type of trading strategies. While ETDs are suitable for short-term holding of positions, OTC markets, conversely, more adequately cater for longer-term strategies. This is because ETDs, due to their high liquidity, as a rule trade at narrow bid-ask spreads in a fully straight-through processing electronic manner with fast electronic matching for price discovery, while OTC markets have generally wider bid-ask spreads and still include broking for price discovery, at least for highly customised agreements. Therefore, it is

investigation concluded that significant barriers to entry would be raised if the entities were to merge, as new competitors would be unlikely to enter the market successfully enough to be a credible competitive threat.

At the time, Eurex²⁹⁰ (that was operated by DB) and Life²⁹¹ (that was operated by NYSE Euronext) had globally the largest market shares for derivatives based on European underlying assets. They used to "compete fiercely to attract and maintain liquidity", "compete on fees, in technology and in product and market design" and were each other's "closest actual and potential competitors." In terms of fees, for derivative contracts where directly comparable alternatives were available on other trading platforms, price competition existed between exchanges. Within this framework, the challenger prices at a considerable discount to the incumbent to attempt to overcome the latter's liquidity advantage, and is also in a position to do so because of the fact that he faces only fixed costs of entry. In a similar vein, the incumbent's capacity to respond with aggressive price cuts itself is restrained primarily by a concern to avoid undercutting its own future revenues once it has addressed the competitive threat.²⁹²

With respect to the market definition, the relevant market for the purposes of the Commission's analysis was the European financial derivatives market, narrowed down to *European single stock*, *interest rate*, and *equity index derivatives traded on exchanges*.

The Horizontal Merger Guidelines identify the situations where a potential concentration can affect the competition in the relevant markets. In specific, "a merger may significantly impede effective competition in a market by removing important competitive constraints on one or more sellers or service providers, who consequently have increased market power. The most direct effect of the merger will be the loss of competition between the merging firms. For example, if prior to the merger one of the merging firms had raised its

generally more difficult to get out of a position in the OTC market as compared to the more liquid on-exchange environment.

For more information on Liffe, see here: https://corporatefinanceinstitute.com/resources/knowledge/trading-investing/london-international-financial-futures-exchange-liffe/.

²⁹⁰ For more information on Eurex, see here: https://www.eurexchange.com/exchange-en/.

²⁹² See Case No COMP/M.6166 - DEUTSCHE BÖRSE / NYSE EURONEXT, Commission Decision of 1.2.2012 declaring a concentration to be incompatible with the internal market and the functioning of the EEA Agreement, paras. paras 543-544.

prices, it would have lost some sales to the other merging firm. The merger removes this particular constraint."²⁹³

As part of the competitive assessment of the trading and clearing of exchange-traded derivatives, general parameters – such as the *cost of trading*, *attracting liquidity*, *technology*, *innovation*, and *process and market design* – were borne in mind.²⁹⁴ In particular, according to the European Commission, the outcome of the proposed merger would have substantially eliminated global competition and would have resulted in important harm to parties to derivatives contracts and the European economy more broadly. In the absence of effective competitive constraint left in the market, the benefits of price competition would be taken away from the relevant market. Notably, the Commission investigation demonstrated that the high barriers to entry would discourage any other players from developing trading in European financial derivatives on a sufficient scale to keep the market competitive. Importantly, the Merger Control Regulation makes clear that all mergers that generate such non-coordinated effects shall be declared incompatible with the internal market.²⁹⁵

For a general overview of the players involved in derivatives based on European financial underlying and key parameters of their services, see the Commission's table produced for the purposes of the merger at issue:

²⁹³ Horizontal Merger Guidelines, OJ C 31, 05.02.2004, para. 24

²⁹⁴ Case M.6166 - DEUTSCHE BÖRSE / NYSE EURONEXT, Commission Decision of 1.2.2012 declaring a concentration to be incompatible with the internal market and the functioning of the EEA Agreement, paras. 500-534.

²⁹⁵ Merger Control Regulation, recital 25.

Table 4: Commission's market overview²⁹⁶

Company	Product offerings			Significant volumes			Sizable European Membership base	Sizable margin pool in European underlyings	Margin offset possibilities between European underlyings
	IR	EI	SE	IR	EQ	SE			
DB	•	•	•	•	•	•	•	•	•
NYX	•	•	•	•	•	•	•	•	•
CME	•	X	X	X	X	X	х	х	х
Turquoise	X	•	X	X	X	X	х	х	х
Nasdaq OMX	•	•	•	Х	X	X	х	х	•
том	X	X	•	X	X	X	х	х	х
ELX	X	X	X	X	Х	X	х	х	х

Note: IR= Interest Rate Derivatives based on European underlyings, EI= Equity Index derivatives based on European underlyings, SE= Single Equity Derivatives based on European underlyings.

Source: Compilation of data from various sources: Notifying Parties and relevant third party responses in market investigation.

(a) Barriers to entry in the relevant markets

As regards barriers to entry, pursuant to the Horizontal Merger Guidelines, "when entering a market is sufficiently easy, a merger is unlikely to pose any significant anti-competitive risk. Therefore, entry analysis constitutes an important element of the overall competitive assessment. For entry to be considered a sufficient competitive constraint on the merging parties, it must be shown to be likely, timely and sufficient to deter or defeat any potential anticompetitive effects of the merger." The General Court has held that "the mere "threat" of an entry is not sufficient [...] What counts is the prospect of an entrant which offsets the anti-competitive effects specifically established in the contested decision at the stage of the assessment." Barriers to entry can be defined as features of the market, which give the incumbent firms an advantage over potential competitors. ²⁹⁹

In a similar vein, according to the EU General Court, barriers to entry "...may consist in elements of various natures, in particular economic, commercial or financial elements,

Case M.6166 - DEUTSCHE BÖRSE / NYSE EURONEXT, Commission Decision of 1.2.2012 declaring a concentration to be incompatible with the internal market and the functioning of the EEA Agreement, para. 134.

²⁹⁷ Horizontal Merger Guidelines, OJ C 31, 05.02.2004, para. 68

²⁹⁸ Case T-342/07, Ryanair Holdings v Commission, Judgment of 6 July 2010, Recital 239.

²⁹⁹ Horizontal Merger Guidelines, OJ C 31, 05.02.2004, para. 70

which are likely to expose potential competitors of the established undertakings to risks and costs sufficiently high to deter them from entering the market within a reasonable time or to make it particularly difficult for them to enter the market, thus depriving them of the capacity to exercise a competitive constraint on the conduct of the established undertakings.³⁰⁰ It follows from the above that competition authorities shall persuasively establish that entry is not only a theoretical and unlikely possibility, but will be an existing and actual threat for the merged entity, thereby placing a competitive constraint on competitors to such an extent that they would refrain from any merger-induced anti-competitive behaviour, if they seek to block a concentration.³⁰¹

On this score, the Commission concluded that European interest rate and equity derivatives were characterised by high barriers to entry. Incumbent firms enjoyed considerable advantages over rival trading platforms because of the netting and cross-margining benefits available to incumbent firms and closed clearing margin pools. In specific, barriers to entry in European equity index derivatives were particularly high because the popular equity indices were IP protected and the IP was controlled by DB and NYSE Euronext who had made clear they were not motivated to, and would not, license these indices to competing exchanges. Any replication of indices would be difficult and susceptible to be legally challenged. Given the popularity and the correlation with European single stock derivatives and desire of customers to trade these *in tandem*, the inability to obtain a licence to list derivatives on these benchmark indices may also deter entry into these neighbouring markets. In addition, the membership base and the associated distribution network constituted a barrier to entry into European derivatives markets, especially for *de novo* players.

(b) Analysis on countervailing buying power

As to the countervailing buying power of the contemplated transaction, it should be taken into consideration that in accordance with the Horizontal Merger Guidelines, "countervailing buyer power in this context should be understood as the bargaining strength

³⁰⁰ Case T-282/02 Cementbouw Handel & Industrie v Commission, [2006] ECR II-319, Recital 219

See Case COMP/M.4439 Ryanair / Aer Lingus, recital 547.

Case M.6166 - DEUTSCHE BÖRSE / NYSE EURONEXT, Commission Decision of 1.2.2012 declaring a concentration to be incompatible with the internal market and the functioning of the EEA Agreement, para. 964. In addition to Merger Control Regulation and its enforcement, the financial regulation discussed above, namely EMIR and MiFID II, has played an eminent role in opening up these silos to allow further liberalization of the relevant markets, see *supra*.

³⁰³ *Ibid*, para. 977.

³⁰⁴ *Ibid*, para. 983.

that the buyer has vis-à-vis the seller in commercial negotiations due to its size, its commercial significance to the seller and its ability to switch to alternative suppliers."³⁰⁵

No evidence of buyer power on the markets in question has been substantiated. In particular, a particular dealer taking its business elsewhere would not any exercise countervailing power as customers are not the ones dictating terms in the relevant markets. Notably, liquidity is the determinant factor³⁰⁶ and, therefore, again not much leverage from the buyer's side had been evidenced in the proposed merger.³⁰⁷

Accordingly, in view of the absence of countervailing factors, the Commission concluded for the purpose of this Decision that the notified transaction was likely to result in a significant impediment to effective competition. This would occur by eliminating the closest actual and potential competitor and creating a dominant or *quasi* monopoly position in the following markets, and this irrespective of the precise geographic market definition and for all categories of customers:

- (i) the market for trading and clearing of existing and new European exchange-traded interest rate futures and options, and this independently of whether or not this market were to be divided between short and long term interest rate derivatives and/or on the basis of the currency of the underlying; and
- (ii) the market for trading and clearing of existing and new European exchange-traded single stock futures and options, and this independently of whether or not this market were to be defined at the

Horizontal Merger Guidelines, OJ C 31, 05.02.2004, para. 64

In securities regulation, the existence of the "best execution" rule determines how trading flows are to chosen in order to, similarly, promote liquidity and offer to investors the best choice in terms of executing the trade order at the lowest available price. For literature on the principle of best execution in the US and the EU, see, for example, David A. Lipton, (1981), Best Execution: The National Market System's Missing Ingredient. Notre Dame Law, 57, 449; Stefan Grundmann (2008). The Fault Principle as the Chameleon of Contract Law: A Market Function Approach. Michigan. Law Review, 107, 1583; Kenneth D. Garbade & William L. Silber (1982). Best execution in securities markets: An application of signaling and agency theory. The Journal of Finance, 37(2), 493-504; and Guido Ferrarini, (2007). Best execution and competition between trading venues—MiFID's likely impact. Capital Markets Law Journal, 2(4), 404-413.

Case M.6166 - DEUTSCHE BÖRSE / NYSE EURONEXT, Commission Decision of 1.2.2012 declaring a concentration to be incompatible with the internal market and the functioning of the EEA Agreement, paras. 1013-1021.

basis of single underlyings, all underlyings of a given nationality, or all EEA underlyings. ³⁰⁸

Additionally, the notified transaction would have resulted in a significant impediment of effective competition in the area of new exchange-traded European equity index futures and options by eliminating the closest competitor. The Commission found that given that it was unlikely that a timely entry would occur and sufficiently constrain the merged entity in its market behaviour, and in the absence of countervailing buyer power, the Notifying Parties' customers would have likely faced higher fees, less product innovation and would *de facto* have had no choice of trading platform for these products.³⁰⁹

Ultimately, the notified transaction would have combined the two leading European derivatives exchanges that are *de facto* the only relevant players in the markets for European derivatives. On this score, the proposed merger, if it had been cleared, would have eliminated actual and potential competition in a number of derivatives products areas, namely existing and new European interest rate and single stock equity derivatives, and this irrespective of the precise product and geographic market definitions. Similarly, competition in the area of new European equity index derivatives would have been eliminated as a consequence of the notified transaction.

(c) Other final considerations that drove the Commission Decision

Competition between the NYSE Euronext and DB in technology, processes, service and market design would have also been eliminated as the barriers to entry into these markets were high and countervailing buyer power weak. The Commission concluded that given the elimination of the only credible constraint that currently exists in these markets, the merged entity would most likely have been able to impose higher trading and clearing fees to customers in the EEA and engage in less product and technology innovation. The *de facto* choice of derivatives trading platforms in the relevant product areas would have gone from two to one as a ramification of which customers would see a reduction in the quality of service.³¹⁰

Moreover, the Commission found that the contemplated transaction between DB and NYSE Euronext was likely to harm competition and innovation in European interest rate and

³⁰⁹ *Ibid*, paras. 1023-1024.

³⁰⁸ *Ibid*, para. 1022.

³¹⁰ Ibid. para. 1028.

single stock equity derivatives markets at a moment when regulatory initiatives are expected to lead to significantly greater volumes of derivatives being traded and/or cleared on exchange. As to the greater impact of the notified transaction, exchange traded derivatives are very important for the economy because they "serve as insurance against price movements and reduce the volatility of companies' cash flows, which in turn results in more reliable forecasting, lower capital requirements, and higher capital productivity." Exchange-traded derivatives also contribute to creating a more liquid financial market for raising capital, which benefits both small and medium enterprises ("SMEs") and larger firms. With no disciplining force left in the market, the merger was most likely to foreclose the benefits of price competition from retail and institutional investors and lead to less innovation in these markets where companies and financial institutions constantly look for new alternatives for their risk transfer solutions.

On the basis of its assessment, the Commission found that the proposed merger was likely to result in a significant impediment of effective competition by creating a dominant or near-monopoly position and eliminating the closest actual and potential competitor in the markets for:

- (i) existing and new European exchange-traded interest rate futures and options, and this independently of whether or not this market were to be divided between short and long term interest rate derivatives and/or on the basis of the currency of the underlying;
- (ii) existing and new European exchange-traded single stock futures and options, and this independently of whether or not this market were to be defined at the basis of single underlyings, all underlyings of a given nationality, or all EEA underlyings;
- (iii) off-order book services for block size European ETD contracts (irrespective of whether this market is further divided on any of the lines considered for on-book trading); and

The regulatory measures this Commission conclusion are pertinent to the MiFID II/MiFIR and EMIR attempts to foster competition in the relevant financial market infrastructure, discussed *infra*.

Case M.6166 - DEUTSCHE BÖRSE / NYSE EURONEXT, Commission Decision of 1.2.2012 declaring a concentration to be incompatible with the internal market and the functioning of the EEA Agreement, para 1029.

(iv) trade registration, confirmation and CCP clearing services for flexible versions of European equity futures and options traded OTC.³¹³

Ultimately, the Commission's evaluation of the proposed merger between NYSE Euronext and DB that culminated in a blocking decision represents a good illustration of some of the conflicts competition authorities face. Had the Commission cleared this merger, the European Union's financial market infrastructure global competitiveness would have been reinforced. Nevertheless, the European trustbuster chose to further the objectives of the internal market and, therefore, blocked the notified transaction. By allowing to the European financial market infrastructure to continue growing and building capacity without facing captive markets for the trading and clearing of on-exchange derivatives, the Commission followed its mandate stipulated in the Merger Control Regulation. In a similar vein, the forthcoming analysis focusses on how the Commission assessed the proposed merger between DB and London Stock Exchange ("LSE") in a much more turbulent regulatory and trade environment due to the aftermath of the Brexit vote.³¹⁴

3.3.2 LSE/DB: THIRD TIME WAS NOT THE CHARM FOR THE MERGER BETWEEN LSE AND DEUTSCHE BÖRSE

On 29 March 2017, the European Commission blocked the proposed merger – and third attempt for the two entities to come together in seventeen years – between LSE and DB after the two financial exchange groups refused to meet the Commission's requests to offset concerns about the creation of "a *de facto*" monopoly in the clearing services of fixed income. Same as in the previous case study, the creation of an EU champion capable of challenging the top US and Asian competitors, such as CME and ICE, never occurred.³¹⁵

For the purposes of reviewing the notified transaction in question, the Commission carried out an investigation that concluded that the proposed merger would have produced a *de facto* monopoly in the markets for clearing fixed income financial instruments by combining

³¹³ *Ibid*, para. 1031.

The relevant trade and regulatory aspects of Brexit in relation to clearing services are briefly touched on the next section. However, due to the uncertainties attached to Brexit the analysis does not try to be exhaustive and it only seeks to underscore the crucial elements that are on the negotiating table between the EU and the UK for the financial services sector under the scrutiny of this thesis.

For more information about the story behind the merger in question, see Financial Times, Rochelle Toplensky & Philip Stafford, Brussels blocks London Stock Exchange-Deutsche Börse merger, 29 March 2017, available here: https://www.ft.com/content/8c582e2a-13d0-11e7-80f4-13e067d5072c. Cf. Financial Times, Philip Stafford, How the LSE and Deutsche Börse's merger unraveled, 3 March 2017, available here: https://www.ft.com/content/80053cd0-ff5d-11e6-8d8e-a5e3738f9ae4.

the businesses of the two largest European stock exchange operators. Together LSE and DB owned the stock exchanges of Germany, the United Kingdom, Italy, and also several of the largest European clearing houses. Notably, as the parties failed to offer the remedies required to alleviate the watchdog's competition concerns, in the form of divestiture or behavioral commitments, the Commission decided not to clear the merger. This was the key in this case. If remedies had been accepted by the parties, the merger would have been cleared. It should be borne in mind that structural remedies are recommended in merger control routinely but only sparingly in 101 and 102 antitrust cases because they are conceived to be disproportional for the latter. The structural remedies are recommended in the latter.

In a telling table, the Commission demonstrates how the legal entities through which DB and LSE were actively participating in the relevant financial services markets complemented one another:

Table 5: LSE and DB presence in various product classes along the EU financial infrastructure value chain³¹⁸

	Equities	Bonds	Repos	Derivatives	
Listing	DBAG FWB) Borsa Italiane	- FWB - Borsa Italiana			
Trading	Xelra FWB Trade Cate Cate	Eurox	• Eurex Repo • MTS	Eurex EEX LSE DM	
Clearing	• Eurex Clearing • LCH Ltd • LCH SA • CC&G	• Eurex Clearing • LCH Ltd • LCH SA • CC&G	- Eurex - LCH Ltd - LCH SA - CC&G	EurevClearing OTCClear ECC CC&G CCC	
Custody, settlement, and collateral management	Ctear- Sream	Clear- stream	Clear- stream Monte Titoli	Clearstream	

Source: Commission's computation based on information from the Notifying Parties.

European Commission – Press Release, 29 March 2017, Mergers: Commission blocks proposed merger between Deutsche Börse and London Stock Exchange, available here https://ec.europa.eu/commission/commissioners/2014-2019/vestager/announcements/mergers-commission-blocks-proposed-merger-between-deutsche-borse-and-london-stock-exchange_en.

For the body of literature discussing structural and behavioral remedies, see, among others, William E. Kovacic (1998). Designing antitrust remedies for dominant firm misconduct. *Conn. L. Rev.*, 31, 1285; Wei Wang (2011). Structural remedies in EU antitrust and merger control. *World Competition*, 34(4), 571-596; John E Kwoka & Diana L. Moss (2012). Behavioral Merger Remedies: Evaluation and Implications for Antitrust Enforcement. *The Antitrust Bulletin*, 57(4), 979-1011; Paul L. Joskow (2002). Transaction cost economics, antitrust rules, and remedies. *Journal of Law, Economics, and Organization*, 18(1), 95-116; Per Helllstrom, Frank Maier-Rigaud & Friedrich Wenzel Bulst (2009). Remedies in European antitrust law. *Antitrust Law Journal*, 76, 43; and Thomas Sullivan (2003). Antitrust Remedies in the US and EU: Advancing a Standard of Proportionality. *The Antitrust Bulletin*, 48(2), 377-425.

³¹⁸ Case M.7995 - DEUTSCHE BÖRSE / LONDON STOCK EXCHANGE GROUP, Commission Decision of 29.3.2017 declaring a concentration to be incompatible with the internal market and the functioning of the EEA Agreement, para. 24.

Additionally, it is worth highlighting that there is strong vertical integration in the infrastructure of DB and LSE for the trading and clearing of financial exchange-traded derivatives.³¹⁹ Since the Markets in Financial Instruments Directive ("MiFID II") and the Markets in Financial Instruments Regulation ("MiFIR") came into force³²⁰ and the clearing of ETDs is required through EMIR for specific transactions, bundle-to-bundle competition for trading and clearing services has increased significantly.

In Chapter II, we discussed how the EU financial regulatory terms-of-trade for the recognition of third-country clearinghouses comply with WTO norms of non-discrimination and good administration at the international economic law context. In the private sphere under competition law, similar standards apply when companies are dominant is specific markets of the European Union. In this context, the notifying parties' underlined how LCH. Clearnet's commitment to provide open access on Fair, Reasonable, and Non-Discriminatory ("FRAND") terms prevents it from engaging in any type of foreclosure strategy.³²¹

Commission's main concerns relating to the proposed merger (a)

As to the specific objections expressed by the European Commission, the services that raised red flags from a competition standpoint were the clearing of fixed income instruments – specifically, the markets for bonds and repurchase agreements ("repos") – as the parties were the only relevant providers of these services in Europe. Notably, the barriers to entry into financial infrastructure markets are high, due to strong network effects and economies of scale and scope. In order to successfully enter the market, a new player would have to overcome (i) high investments, and (ii) high regulatory requirements, (iii) achieve low costs, (iv) position itself to offer innovative product offerings to challenge what existing CCPs are able to offer, and (v) obtain the support of a sufficient number of market participants.³²²

In paragraph 200 of its Decision, the Commission concluded "the Transaction would lead to a significant impediment of effective competition through the strengthening of a

³¹⁹ *Ibid*, para 42.

Directive 2004/39/EC on markets in financial instruments (OJ L 145, 30.4.2004) and Regulation No 600/2014 on markets in financial instruments "MiFIR" (OJ L 173, 12.6.2014) Directive 2004/39/EC, OJ L 145, 30.4.2004.

³²¹ Case M.7995 - DEUTSCHE BÖRSE / LONDON STOCK EXCHANGE GROUP, Commission Decision of 29.3.2017 declaring a concentration to be incompatible with the internal market and the functioning of the EEA Agreement, para 78.

³²² *Ibid*, 196-197.

dominant position and creation of a de facto monopoly in the market for CCP clearing of bonds in the EEA."

In specific, the Commission took account of the following factors in its evaluation. Namely: (i) the fact that the proposed merger would result in eliminating the only other player active in clearing of automated trading system ("ATS") of non-triparty repos; (ii) the importance of clearing for customers trading non-triparty repos on ATS; and (iii) the lack of likely entry. The Commission found that the LSE and DB proposed merger would lead to a significant impediment of effective competition through the strengthening of a dominant position on the market for ATS traded and CCP cleared non-triparty repos in the EEA. This finding is irrespective of the precise market definition.³²³

Further, having borne in mind the high market shares of LSE and DB, the elimination of DBAG's sole competitor, the likely intensification of competition that was expected to occur absent the contemplated transaction and the lack of likely market entry, the Commission noted that the proposed merger would result in an important restraint of effective competition on the same markets.³²⁴

The Commission analysis delved into specific aspects of the proposed merger concerning vertical foreclosure. Broadly, with respect to vertical foreclosure, two types of foreclosure can arise; namely, (i) restriction of access to an important input (*input foreclosure*) or (ii) restriction of access to a sufficient customer base (*customer foreclosure*).³²⁵ Importantly, "A merger is said to result in foreclosure where actual or potential rivals' access to supplies or markets is hampered or eliminated as a result of the merger, thereby reducing these companies' ability and/or incentive to compete. "326 Furthermore, the Commission guidelines on the assessment of non-horizontal mergers stipulate, "significant harm to effective competition normally requires that the foreclosed firms play a sufficiently important role in the competitive process on the downstream market".³²⁷ They also mandate, "for input foreclosure

³²³ Ibid, 381-418. In particular, the Commission reached this finding irrespective whether the markets are defined as a combined market for the trading and clearing of ATS traded non-triparty repos or a market for clearing of ATS traded non-triparty repos that is separate from trading of ATS non-triparty repos that are CCP cleared.

³²⁴ *Ibid*, 465.

³²⁵ Ibid 570

Non-Horizontal Merger Guidelines, OJ C 265, 18.10.2008, para. 29

³²⁷ *Ibid*, para. 48

to lead to consumer harm, it is not necessary that the merged firm's rivals are forced to exit the market". 328

On this score, the Commission's assessment drew the conclusion that there would be no market player able to replace the competitive pressure exercised by Euroclear on Clearstream had the merger gone through. In addition, the contemplated transaction between DB and LSE would result in an important impediment of effective competition by offering the merged company with the capacity and the incentive to foreclose competitors from the markets for international and custody services for fixed income.³²⁹ As a general note, it is important to highlight that the more thorough the Commission's analysis is and the more market segments it takes into consideration, the higher the likelihood that its findings do not miss any relevant factor.

Moreover, as to the role of regulation to alleviate anti-competitive conduct, the Commission concluded that the regulation on central securities depositories ("CSDs")³³⁰ and Target-2-Securities ("T2S")³³¹ were not able to prevent the harm to competition.³³² On this score, the Commission concluded that the proposed merger between DB and LSE would lead to a significant impediment of effective competition in the markets for settlement and custody services provided in relation to fixed income by ICSDs and global custodians. By virtue of the parties' "de facto monopoly in the market for ATS traded and CCP cleared non-triparty repo clearing, the market for ATS traded and CCP cleared triparty repo clearing and to a lesser extent, the market for CCP clearing of bonds, the merged entity would have the ability and incentive to partially foreclose competitors, and more particularly its closest competitor Euroclear, by diverting cleared repo transaction feeds to Clearstream, which would prevent

³²⁸ *Ibid*, para. 31

³²⁹ Case M.7995 - DEUTSCHE BÖRSE / LONDON STOCK EXCHANGE GROUP, Commission Decision of 29.3.2017 declaring a concentration to be incompatible with the internal market and the functioning of the EEA Agreement, paras. 653, 669.

Regulation (EU) No 909/2014 of the European Parliament and of the Council of 23 July 2014 on improving the securities settlement in the European Union and on central securities depositories. For relevant literature on the regulation of CSDs see, among others, Delphine Nougayrède, (2018). Towards a Global Financial Register? The Case for End Investor Transparency in Central Securities Depositories. *Journal of Financial Regulation*, 4(2), 276-313, and Diehl Martin, Heild Christoph, & Tobiasch Katharina, (2019). The consolidation of TARGET2 and TARGET2-Securities: How is the Eurosystem exploring synergies across its infrastructures, and how will this impact day-to-day operations? *Journal of Securities Operations & Custody*, 11(3), 198-212.

For more information on the T2S platform put forward by the ECB, see here: https://www.ecb.europa.eu/paym/target/t2s/html/index.en.html.

Case M.7995 - DEUTSCHE BÖRSE / LONDON STOCK EXCHANGE GROUP, Commission Decision of 29.3.2017 declaring a concentration to be incompatible with the internal market and the functioning of the EEA Agreement, paras. 670-677.

competitors from being able to effectively compete."³³³ As financial market infrastructure is intimately interconnected, it is very likely that the effects of a contemplated merger to extend beyond the narrowly defined markets that the notifying parties promulgate, as pointed out by the Commission in this passage.

In the same vein, regarding the efficacy of MiFID II and MIFIR in promoting competition among trading venues and stock exchanges, the Commission noted that despite the important role of those regimes in promoting competition in trading, MiFID II and MIFIR would not fully prevent foreclosure of trading venues that would have been generated by the proposed merger.³³⁴

In respect of collateral management services ("CMS") concerning the relevant markets, the Commission noted that the proposed merger would lead to a significant impediment of effective competition. In light of DB and LSE's *de facto* monopoly in the above-mentioned markets, the foreclosure of Euroclear, would lead to "diverting cleared repo transaction feeds and requiring customers to post collateral at Clearstream, which would prevent competitors from being able to effectively compete in the market."³³⁵ As Euroclear was Clearstream's closer competitor and only other existing ICSD, it had a prevalent role in the competitive landscape that took place in the relevant markets. The potential foreclosure of Euroclear would have had a significant effect on competition on the relevant markets. This is an additional consideration that played a role in the Commission's decision.

As to the implications of the proposed merger in derivatives markets, the Commission held that Eurex and Euronext were close competitors in the potential market for single stock equity derivatives based on Belgian, French, and Dutch underlying securities and, therefore, that the merged entity would have been in a position to control pricing of both of them.³³⁶ In particular, the Commission considered that the contemplated transaction would have: "lead to a significant impediment of effective competition in a potential market for single stock equity derivatives based on Dutch, French, and Belgium underlyings as it would eliminate competition for combined trading and clearing of exchange traded derivatives in a number of

³³³ *Ibid*, para. 678

³³⁴ Ibid, paras. 877-880. Interestingly, the specific provisions promoting "open-access" among trading venues and their clearinghouses would not have been implemented by all EU Member States until 2020. Something that holds true to date.

³³⁵ *Ibid*, para. 709

³³⁶ *Ibid*, para. 837

underlyings where Eurex competes with Euronext relying on merchant clearing services from LCH. Clearnet SA."³³⁷ Furthermore, the Commission's evaluation underlined that the proposed merger would have led to a significant barrier to competition in the market for single stock equity derivatives because (i) it would have eliminated the horizontal bundle-to-bundle competition between Eurex and Euronext, and (ii) it would have foreclosed Euronext (fully or partially) relying on clearing services provided by LCH SA.³³⁸ Those reasons explain why the Commission was hesitant with proceeding with the proposed merger's clearance.

(b) Final considerations

Overall, the merger would have combined the capacities of DB's Eurex with LSE's LCH. Clearnet (comprising the London based LCH. Clearnet Ltd. and the Paris based LCH. Clearnet SA) and Rome based Cassa di Compensazione e Garanzia. The outcome of such merger would have resulted in a monopoly in the *clearing of fixed income securities* sector. In addition, this monopoly would impact on the downstream markets for settlement, custody, and collateral management as service providers in these markets depended on transaction feeds from central counterparties. As DB's Clearstream competed with these service providers, the merged entity would have had the ability and the incentive to divert transaction feeds to Clearstream and foreclose the other competitors.

Further, the proposed merger would have foreclosed horizontal competition for the trading and clearing of single stock equity derivatives (based on shares of French, Dutch and Belgian corporations). At the time, Eurex competed with a bundled product (combining trading and clearing services) provided by Euronext and LCH.Clearnet SA. Had the merger been cleared, LCH.Clearnet – which had important pricing power over the bundled service – would had less motive to compete with Eurex. It should be noted well that the economics of bundling are highly complicated.³³⁹ Ultimately, such high market power could potentially be used to squeeze out Euronext.

As the European Commission spelled out these concerns in a Statement of Objections it issued in December 2016, the parties proposed a remedy to address them

³³⁷ *Ibid*, para. 838.

³³⁸ *Ibid*, paras. 881-882.

For relevant literature elaborating on the economics of bundling, see, *inter alia*, Bruch H. Kobayashi (2005). Does economics provide a reliable guide to regulating commodity bundling by firms? A survey of the economic literature. *Journal of Competition Law & Economics*, 1(4), 707-746; Barry Nalebuff (2004). Bundling as an entry barrier. *The Quarterly Journal of Economics*, 119(1), 159-187.

consisting of the divestment of LCH.Clearnet SA.³⁴⁰ The Commission noted that this divestment would have resolved the concerns pertinent to single stock equity derivatives but it would not have been effective to remedy the concerns emanating from the creation of the *de facto* monopoly in fixed income clearing. On that score, the fixed income clearing leg of LCH.Clearnet SA's was dependent upon the trading feeds from LSE's fixed income trading platform called MTS. In the absence of these feeds, the prospects of this business line would be severely compromised. The divestment of MTS would have been sufficient to alleviate the Commission's competition considerations but the set of behavioral remedies offered by the parties did not persuade the Commission, which ultimately decided to block this merger.

From a helicopter view, the timing of the proposed merger between LSE and DB coupled with the Commission's anti-competitive concerns culminated in this outcome. The prospect and uncertainties of Brexit tempered the parties' willingness to conclude the deal. As evidenced, in the structural remedies discussion with the Commission DB and LSE were not prepared to go the extra mile and, therefore, the deal was bound to fail for the third consecutive time. In the counterfactual scenario, where Brexit was not on the table and there was certainty about the business environment between the EU and the UK,³⁴¹ things might have evolved differently.

Indeed, the Commission's conclusions are premised on valid concerns regarding the effective competition in the relevant EEA markets. However, given that financial services and specifically derivatives are traded internationally, perhaps it would have been favorable from a policy perspective to reflect on the prospect of creating international champions capable of challenging the strongest international market infrastructure.³⁴² In any event, a debate on whether merger control shall remain as is or it should be subjected to political influence is bound to take place at the highest political level. The writer advocates in favor of

-

³⁴⁰ *Ibid*, paras. 924-1027

To date, the trading and regulatory systems under which the EU and the UK businesses would be carried out business have not been deciphered. As such, legal uncertainty reigns and the next section attempts to shed light on the aspects pertinent to the clearing of financial instruments between the EU and the UK.

For background discussion of this argument in the context of the French and German reactions to the Commission's blockage of the proposed merger between Alstom/Siemens. See, for instance, Konstantinos Efstathiou, (2019), The Alstom-Siemens merger and the need for European Champions, Bruegel, available here: https://bruegel.org/2019/03/the-alstom-siemens-merger-and-the-need-for-european-champions/; and Richard Lough, (2019), Explainer: Why Alstom-Siemens rail merger is creating European tensions, Reuters, available here: https://www.reuters.com/article/us-alstom-m-a-siemens-politics/explainer-why-siemens-alstom-rail-merger-is-creating-european-tensions-idUSKCN1PB216.

legal certainty, and as such endorses the application of clear rules that do not permit state interference in concentration control proceedings.

3.3.3 COMPETITION ASSESSMENT OF THE EU MERGER CONTROL IN FINANCIAL MARKET INFRASTRUCTURE

Same as in the assessment on the effects of EU antitrust law in the liberalization of financial infrastructure in the European Union internal market, the EU merger control system and its application by the Commission works in the benefit of competition dynamics both at the EU and at the global level. This is in accordance with the first and second requirements identified above. In specific, it is obvious that by blocking the proposed fmerger in the two instances the competitive landscape in the EU, but internationally as well, is better off as competitors from the EU internal market and from outside the EU can continue providing their services in the Union without having to face monopolistic forces against them. That would have been the case in the counterfactual scenario under which the mergers would have been cleared and the dominant companies in the specific financial market infrastructure segments would be able to exercise considerable pressure to any market participant.

As to the third requirement of the competition assessment on the EU industry's global competitiveness, it is clear that EU concentration control does not favor the European financial market infrastructure and it prioritizes the application of effective competition in the EU internal market.³⁴³ This explains the blocking of the two mega-mergers that would have created EU champions in the provision of financial market infrastructure services at the global level. Thus, the should be no doubt that the EU merger control system contributes to the liberalization of financial market infrastructure in the EEA.

3.3.4 Broader Political Economy Considerations

The two case studies discussed in the section above reveal that merger control plays a pivotal role in how competition in financial market infrastructure flourishes in the European Union, and (to a high extent) how the industry is formed at the international level. Unlike the case of anti-competitive conduct being – softly – regulated at the international level, ³⁴⁴ merger control so far solely relies on the regimes of national and regional jurisdictions.

In support of this view, Bradford, Jackson and Zytnick demonstrate in an empirical study that the EU merger control system does not promote the agendas of the European Union industry. For more details, see Anu Bradford, Robert J. Jr. Jackson & Jonathan Zytnick, (2018). Is eu merger control used for protectionism? an empirical analysis. *Journal of Empirical Legal Studies*, 15(1), 165-191.

Notably, Article XIII ("Monopolies and Exclusive Service Suppliers") and Article IX ("Business Practices") of the GATS set forth soft law rules for the application of antitrust rules. The consistency of those provisions

Thus, it is very challenging for homogeneity to be present both in the substance and in the enforcement of those national or regional rules. As a direct consequence of diverging merger control regimes, the way financial market infrastructure develop and consolidate worldwide might vary significantly.

The comment above paves the way to a broader concern on how the liberal global economic model in its current shape fails to capture important global actor's activities, such as China's, that generate asymmetries and competitive advantages that do not strictly rely on the international economic order, as we know it. The example of *China-Electronic Payment Systems*, discussed in *Chapter II*, is illustrative of how China's financial system directly challenges worldwide competitors by disregarding international trade law rules and China's own commitments under the GATS.³⁴⁵

All in all, from a political economy standpoint for the terms-of-trade of financial services to be on an equal footing, the consolidation of financial institutions and market infrastructure and, accordingly, their concentration control regimes, need to be to a high extent harmonized. The practical difficulties of such endeavor are vast as many WTO Members have not adopted national merger control rules or have done so very recently.³⁴⁶

For the sake of completeness, given that the financial sector is predominantly exposed to crises for a series of reasons it is only natural for merger control rules to be ignored, as they have been,³⁴⁷ in occasions where the integrity of financial systems is in question. In the same vein, the international economic legal order either at the WTO or at the regional level provides specific set of rules, discussed in *Chapters II* and *III*, respectively, which directly

have never been the subject of a dispute at the World Trade Organization. Nevertheless, the only time a WTO Panel was called to interpret the legality of competition rules associated with telecommunication services was in *Mexico-Measures Affecting Telecommunication Services* in DS204, where the outcome has been contested for its legal rigour. For literature opining on the validity of the panel report, see Petros C. Mavroids & Damien J. Neven, (2006), El mess in TELMEX: a comment on Mexico-measures affecting telecommunication services, *World Trade Review*, vol. 5, no. 2, pp. 271-296.

For more details, see the analysis above, in *Chapter II*.

See, for instance, Joseph Wilson, (2003). Globalization and the limits of national merger control laws. Kluwer Law International BV; Nicholas Levy, Alexander Waksman, & Lanto Sheridan, (2019). Global merger control—where to now?. Journal of Antitrust Enforcement; Dane Holbrook (2002), International Merger Control Convergence: Resolving Multijurisdictional Review Problems, UCLA Journal International Law & Foreign Affairs, 7, 345.

For instance, in June 2017, the European Central Bank ("ECB") held that the Spanish Bank, Banco Popular, to be "failing or likely to fail" and, consequently, the Commission permitted Banco Santander to complete its acquisition of Banco Popular prior to obtaining formal merger clearance. For more details, see Commission Decision (Article 7(3)) of June 2017 in Case M.8553, Banco Santander S.A./Banco Popular Group S.A.

provide prudential carve-outs in times of financial turbulence.³⁴⁸ The next Section draws the lessons learnt from investigating the interplay between the European regulation of clearinghouses and EU competition law.

4. TAKEAWAY: IS IT TIME FOR AN INTERNATIONAL COMPETITION LAW SYSTEM AT THE WTO?

The foregoing analysis has shown that the application of EU competition law has significantly contributed to the integration of financial market infrastructure not only in the EU but also at the global level – as the European Economic Area is a market of great interest to third-country financial services players who benefit from the enforcement of the Commission's rulings. There is literature and case law discussing the extra-territorial reach of EU competition law but, nevertheless, justifiably there are certain limits that restrict its universal application.³⁴⁹ Notably, on the ground there are more than 130 competition law systems and, accordingly, antitrust authorities charged with reviewing merger filings and investigating potentially anti-competitive conduct. Inevitably, even if the rules across those jurisdictions are fairly similar the likelihood of coherent application thereof is relatively low. Therefore, in order to grasp in full the benefits and potential of competition law in integrating financial services – and others sectors of the economy – across the globe a uniform system (in the form of an international treaty) accompanied by an international competition authority – to supervise and coordinate with the workings of national ones – would be preferable, assuming that there would be sufficient political appetite by States.

The WTO, as discussed above, has mildly attempted to scrutinize anticompetitive conduct (with a focus on the telecommunications sector). However, the existing competition-related provisions housed in the GATS do not by any means qualify as a sufficient framework able to tackle anti-competitive conduct. A drastic shift driven by WTO Member States' willingness would be required to initiate discussions on harmonizing Members' competition rulebooks under the WTO. This is quite a farfetched scenario, given the existing

³⁴⁸ For a thorough and insightful analysis on the nature of the prudential-carve out under the GATS and regional trade agreements, see Carlo M. Cantore, (2018). The prudential carve-out for financial services: rationale and practice in the GATS and preferential trade agreements. Cambridge University Press.

For literature on the subject, see, inter alia, Joseph P. Griffin (1999), Extraterritoriality in US and EU Antitrust Enforcement, Antitrust Law Journal, 67, 159; Florian Wagner-von Papp, (2012), Competition law and Extraterritoriality, Research Handbook on International Competition, Edward Elgar Publishing; Luca Prete (2018), On Implementation and Effects: The Recent Case-law on the Territorial (or Extraterritorial?) Application of EU Competition Rules, Journal of European Competition Law & Practice, 9(8), 487-495.

skepticism that the multilateral trading system is facing as a result of the U.S. stance with regard to the appointment of Appellate Body Members.³⁵⁰

Nevertheless, competition law as a discipline is applicable on economic actors' trade transactions. At the international level, there is not a more adequate institution that could host potential discussions regarding the codification of international competition law rules than the WTO due to its prominence as an organization regulating international economic law and having an efficient dispute settlement mechanism for the scrutiny of those rules.

Consequently, although the WTO is currently facing an identity crisis as the negotiations are stagnant and the Appellate Body is currently understaffed and falling short of having the minimum number of judges (i.e. 3) to deliver reports, the fact remains that due to the scope of WTO's mandate it would still be the most competent international actor to lead the negotiation on an international competition treaty should WTO Members decide to put again their faith back to the multilateral trading system and seek to attain further integration of global markets through the benefits of competition law.

5. Brexit: High Stakes for Clearing Services in the Anticipation of a New Economic Integration Model

Due to the uncertainties attached to the nature of the arrangement that the EU is going to reach with the UK in the advent of the extended Brexit date – 31 October 2019 at the time of writing, this section briefly investigates the role of clearing services for the future governance of financial services between the EU and the UK.³⁵¹ This is an unprecedented expression of disintegration for the European Union and this analysis only focuses on relevant aspects for the future of trading clearing services between the EU and the UK and does not engage in any broader debate by taking sides or speculating the unexpected.

In order to draw conclusions about the political and economic reality surrounding clearing services ahead of Brexit, the forthcoming analysis (i) first, brings into the spotlight the

For the sake of clarity, this *Chapter* has been drafted and submitted before January 31 2020 and, therefore, any developments reached between the EU and the UK during the transition period, which would last until the 30th of December 2020, are not reflected in its content.

148

For academic discourse on this subject matter see, for example, Petros C. Mavroidis & Bernard Hoekman (2019), Burning Down the House? The Appellate Body in the Centre of the WTO Crisis, Robert Schuman Center for Advanced Studies Research Paper, RSCAS no 56; Jennifer Hillman, (2019), Three Approaches to Fixing the World Trade Organization's Appellate Body: The Good, The Bad, and the Ugly, working paper, Institute for International Economic Law, Georgetown University Law Center; Rachel Brewster, (2018), The Trump Administration and the Future of the WTO, *Yale Journal of International Law Online*.

recent relevant EU case law concerning the supervision of clearinghouses in the EU internal market. This case paves the way to take stock of the fundamentally different views expressed by the EU and the UK financial regulators. Second, the analysis (ii) evaluates the latest state of play with respect to the agreement between the EU and UK on clearing services, as reflected in the relationship between the regulators in a hard Brexit scenario, and third, (iii) EMIR's proposed reform reflecting some core elements of this debate is briefly discussed. Finally, entative considerations are drawn at the end of the analysis.

5.1 GENERAL COURT JUDGEMENT IN CASE T-496/11, UK v. ECB (LOCATION POLICY)

In Case T-496/11, UK v. ECB (Location Policy) decided in March 2015, the General Court held that the European Central Bank ("ECB") does not have the competence to put forward regulation concerning clearinghouses. In particular, the EU General Court annulled an ECB policy that purported to restrict access to the euro area of certain central counterparties originating in the non-euro area. The forthcoming analysis investigates the more prominent elements of this judgement and assesses the relevant regulatory environment and supervisory context, bearing in mind the particularities surrounding Brexit.

The ECB's "location policy" that was formulated in 2001 triggered the case at hand. This policy was formulated as follows: "The natural geographical scope for any 'domestic' market infrastructure (including central counterparty clearing) for securities and derivatives denominated in euro is the euro area. Given the potential systemic importance of securities clearing and settlement systems, this infrastructure should be located within the euro area."³⁵²

The ECB's interest in clearinghouses is justified as every securities transaction consists of two parts, a securities part and a cash part. Accordingly, there is a direct relationship between financial market infrastructure and payment systems. Thus, disruptions in the transfer of financial instruments might "spill over to disruptions of the payment systems that are used by the securities settlement systems." Although this policy was never used in practice, the UK challenged its legality in view of the possibility of pressure being exerted to London-based clearinghouses to migrate their euro activities within the euro area. The overarching principle behind this policy has been in the epicenter of regulatory debate preceding Brexit, as

Although the legislative version of EMIR II under review seems to have incorporated its considerations as discussed in the next subsection.

ECB, "The Eurosystem's Policy Line With Regard to Consolidation in Central Counterparty Clearing, 2001" (Press release, 27 September 2001).

ECB, "Eurosystem Oversight Policy Framework", 5 July 2011, p. 5. Develop footnote 21 from HM

it is discussed later in this section. Interestingly, in this case the General Court sided with the UK, noting that "the ECB does not have the competence necessary to regulate the activity of securities clearing systems".³⁵⁵

As background to this dispute, the reasoning put forward by the ECB indicated that the term "oversight" is not part of the EU treaties' acquis and this should be well borne in mind as at the time EU treaties were contemplated "the understanding of oversight as a separate function was only just developing." ³⁵⁶ As a result, this omission at stake must have been without intention. In addition, at that time "clearing and settlement systems had not yet gained the size and relevance that they subsequently acquired, particularly on a cross-border context." ³⁵⁷ Notably, the ECB admitted that it lacked explicit mandate to oversee securities settlement systems. However, it claimed that such powers should be interpreted as consequential to its other tasks stipulated in Article 127 TFEU, and the ECB/ESCB Statute. In particular, the ECB premised its views on Articles 127(1) and 127(2) TFEU as well as on Article 22 of the ECB/ESCB Statute. ³⁵⁸

As to the content of these provisions, the overarching goal of the European System of Central Banks ("ESCB") is to maintain price stability (Art. 127(1) TFEU), whereas Article 127(2) TFEU sets out that the ESCB's core tasks also include the promotion of the smooth operation of payment systems. Moreover, Article 22 of the ECB Statute further clarifies that "the ECB and national central banks may provide facilities, and the ECB may make regulations, to ensure efficient and sound clearing and payment systems within the Union and with other countries." The ECB claimed that the above legal basis, coupled with the task to contribute to the stability of the financial system (Art. 127(5) TFEU) also grants it supervisory and regulatory powers over all types of clearing systems, including central counterparties. 359

The General Court was not persuaded by the ECB's claims and sided with the UK. Nevertheless, what is of the essence in this debate is to comprehend what are the competing points of view expressed in the dispute. On the one hand, the ECB insists that the supervision

357 *Ibid*, para. 74.

³⁵⁵ Case T-496/11, UK v. ECB (*Location Policy*), para. 110.

³⁵⁶ *Ibid*, para. 68.

³⁵⁸ *Ibid*, paras. 86-87

See the Opinion of the European Central Bank (ECB) of 27 Nov. 2012 on various draft regulatory and implementing technical standards submitted by the ESMA to the Commission, O.J. 2012, C 60/1, p. 2, where it expressly states the Eurosystem's supervisory "competence over clearing and payment systems derives from these provisions."

of entities with a systemic importance for the Euro currency should take place by it and such entities should establish within the Euro area. This consideration has a stability raison d'être but the extent to which it makes sense from an economic standpoint and whether its proposal is necessary or proportionate from is a completely different question. On the other hand, the liberalization of financial infrastructure in the European Union would favor the freedom of establishment and freedom to provide services, irrespective of any systemic considerations. The right balance between competition and systemic stability in financial services sectors is a conundrum where no convincing answers have been put forward.³⁶⁰ This study does not purport to contribute to this debate, but rather underlines its existence on the passing.

For the purposes of understanding the underlying dynamics associated with Brexit, it is key to keep in mind the existence of the debate triggered by this dispute as it has re-emerged in the surface in the wake of the Brexit discussions between the EU and the UK, as discussed below. The remainder of this section investigates the regulatory developments touching on clearing services in the Brexit context and offers tentative conclusions in relation to liberalization prospects.

5.2 WAY FORWARD FOR CLEARING SERVICES IN CASE OF HARD BREXIT

In preparation of a UK exit out of the EU internal market without a withdrawal agreement, which would define their future trade relations, ESMA agreed a Memorandum of Understanding ("MOU") with the Bank of England ("BOE"). This MOU concerns the recognition of UK CCPs in order to "limit the risk of disruption in central clearing and to avoid any negative impact on the financial stability of the EU."³⁶¹ Given that under this presumption the UK would have to be treated as third country, EMIR Article 25 becomes relevant for the

-

For literature elaborating on the relationship between stability and competition in financial services, see, for example, Bart de Meester (2014) Liberalization of Trade in Banking Services: An International and European Perspective, Cambridge: Cambridge University Press, and Xavier Vives, (2016) Competition and Stability in Banking: The Role of Regulation and Competition Policy, Princeton University Press.

³⁶¹ See ESMA, Press Release: ESMA agrees no-deal Brexit MOUs with the Bank of England for recognition of UK and February 2019, available **CCPs** the UK CSD, here: https://www.esma.europa.eu/sites/default/files/library/esma71-99-1107 esma agrees nodeal brexit mous with the bank of england for recognition of uk ccps and the uk csd 0.pdf; Bank of England, News release, Bank of England and European Securities and Markets Authority agree Memoranda of Understanding, 4 February 2019, available here: https://www.bankofengland.co.uk/-/media/boe/files/news/2019/february/bank-of-england-and-european-securities-and-markets-authorityagree-memoranda-ofunderstanding.pdf?la=en&hash=4F1F477EC347D4A12E6D5ED698E6669258929C5A.

assessment of UK's CCPs "equivalence". 362 Accordingly, the four conditions for equivalence housed in EMIR Article 25, described in detail in *Chapter II*, would have to be fulfilled for UK clearinghouses to operate in the EU. The conclusion of this MOU between ESMA and the BOE satisfies the third recognition condition, namely the establishment of cooperation arrangements between supervisory authorities.

On 5 April 2019, ESMA announced that in accordance with EMIR Article 25 it has adopted new recognition decisions for the clearinghouses established in the UK to take account of the extension to the Article 50 of the Treaty of the European Union ("TEU") period to April 12 2019. In essence, the extension to the Article 50 TEU period implies that the ESMA recognition decisions would only apply and take effect on the day following Brexit date, in the event that a no-deal Brexit has occurred.³⁶³

This contingency plan set out by the European Union and the United Kingdom financial regulators makes evident that the UK is to be treated as any other third country in the event that a no-deal Brexit scenario materializes. Consequently, once this disintegration scenario occurs and provided that no plurilateral trade arrangement has been struck between the two, in the form of an EIA, then it seems inevitable that the two currently EU Member States will start implementing WTO terms for trade in financial services. This is a radical shift for the UK financial services sector, which will be transitioning from the liberal EU internal market conditions to the substantially less integrated WTO terms when trading financial services with fellow EU Member States. Notably, in times of uncertainty academic literature has sufficiently addressed the potential implications of such transition for financial services sectors.³⁶⁴

_

The three central counterparties established in the United Kingdom are LCH Limited, ICE Clear Europe Limited, and LME Clear Limited.

See ESMA, Press Release: ESMA has adopted new recognition decisions for the three UK CCPs and the UK CSD in the event of a no-deal Brexit on 12 April, 5 April 2019, available here: https://www.esma.europa.eu/press-news/esma-news/esma-has-adopted-new-recognition-decisions-three-uk-ccps-and-uk-csd-in-event-no.

Literature has accentuated the potential negative ramifications of Brexit related to financial services sectors. See, for example, Niahm Moloney, (2016). Financial services, the EU, and Brexit: an uncertain future for the city? German Law Journal, 17(S1), 75-82; John Armour, (2017). Brexit and financial services. Oxford Review of Economic Policy, 33(suppl_1), S54-S69; David Howarth, & Lucia Quaglia, (2018). Brexit and the battle for financial services. Journal of European public policy, 25(8), 1118-1136; Karel Lannoo, (2016). EU financial market access after Brexit. Intereconomics, 51(5), 255-260; Kern Alexander, Catherine Barnard, Eilis Ferran, Andrew Lang, & Niahm Moloney (2018). Brexit and financial services: law and policy. Bloomsbury Publishing; and Wolf-Georg Ringe, (2018). The irrelevance of Brexit for the European financial market. European Business Organization Law Review, 19(1), 1-34.

Naturally, preparing in advance for future disruptions in the operations of trade in financial services, as is the case of no-deal Brexit, is prudent especially when dealing with financial infrastructure sectors, such as securities' clearing, that are of the essence for the integrity of financial systems and the preservation of financial stability in capital markets. Nevertheless, doing preparatory work and anticipating such scenario does not mean that there will be no further hardship on both ends in navigating their way through the uncharted territory of disintegration in the European Union. The forthcoming analysis discusses EMIR's proposed revisions that are currently under the legislative process and underscores how the new form of location policy included in the legislative draft might impact on the future of clearing services between the EU and the UK.

5.3 EMIR REVIEW: PROPOSED REFORMS REGARDING THE CLEARINGHOUSES' LOCATION POLICY

In 2015 and 2016, the European Commission conducted an extensive evaluation of EMIR, through a public consultation and a public hearing on updating EMIR, the publication of a general report on EMIR,³⁶⁵ and the publication of an impact assessment on possible changes to EMIR in the context of the regulatory fitness and performance program ("REFIT"). As a result of this assessment, the Commission proposed amendments that would simplify the rules on OTC derivatives in the pursuit of decreasing costs and burdens for market participants and improving the oversight of third-country clearinghouses while streamlining the supervision of EU clearinghouses.³⁶⁶

Interestingly, in line with ECB's approach in *Case T-496/11, UK v. ECB (Location Policy)* the Commission's proposal for a regulation updating EMIR of June 2017 offers a wider regulatory grip to the European Central Bank in the processes of authorization, recognition, and supervision of central counterparties based both within and outside the European Union. For the ECB to take up these new responsibilities it adopted a recommendation to amend article 22 of its statute. In particular, the revised Article 22 of the European System of Central Banks and of the European Central Bank would read as follows: "*The ECB and national central banks*"

_

Report from the Commission to the European Parliament and the Council under Article 85(1) of Regulation (EU) No 648/2012 of the European Parliament and of the Council of 4 July 2012 on OTC derivatives, central counterparties and trade repositories. COM/2016/0857, available here: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52016DC0857

For the proposed amendments on EMIR and their accompanying impact assessments, see the May 2017 Proposal and Impact assessment, available here: https://ec.europa.eu/info/law/better-regulation/initiatives/com-2017-208 en, and the June 2017 Proposal and Impact assessment, available here: https://ec.europa.eu/info/law/better-regulation/initiatives/com-2017-331 en.

may provide facilities, and the ECB may make regulations, to ensure efficient and sound clearing and payment systems, and clearing systems for financial instruments, within the Union and with other countries."³⁶⁷

This amendment would naturally offer the ECB a clear mandate in the area of securities clearing, which would allow the Eurosystem to apply the powers vested with central banks issuing a currency under the EMIR revision. Following this recommendation, the Commission in October 2017 published a favorable opinion,³⁶⁸ and on 13 March 2019, the European Parliament and EU Member States reached an agreement to change the statute of the European System of Central Banks and of the European Central Bank.

A first set of EMIR's review, EMIR Refit (also referred to as EMIR 2.1) entered into force on 17 June 2019.³⁶⁹ However, the most contentious elements of EMIR's review process, namely the location policy for third-country clearinghouses through the revision of EMIR's Article 25 has not yet passes all the regulatory steps to finally be adopted, as part of the EMIR 2.2 package. What is mostly interesting as regards this location policy concerns the fact that systemically important third-country clearinghouses would be required to establish within the European Union. More specifically, the Commission and ESMA will be adopting an increasingly impact-based approach in assessing third-country CCPs on the basis of the impact of their activities in the European Union, instead of focusing on the risks that they actually pose. Given the importance of UK financial market infrastructure within the EU, this approach is likely to impinge on the UK's clearinghouses and the EU's market participants alike.

As highlighted in the ECB case before the General Court, EU authorities place lots of attention to the scale of clearing in euro-denominated derivatives that occurs outside the Eurozone, and the UK ones constitute their primary concern (even before Brexit was on the table). Pursuant to the proposed EMIR 2.2, the following tagging exercise is contemplated

See ECB, Press Release: ECB recommends amending Article 22 of its Statute, 23 June 2017, available here: https://www.ecb.europa.eu/press/pr/date/2017/html/ecb.pr170623.en.html.

See Commission Opinion on the Recommendation of the European Central Bank for a Decision of the European Parliament and of the Council amending Article 22 of the Statute of the European System of Central Banks and of the European Central Bank, 3 October 2017, available here: https://ec.europa.eu/info/publications/economy-finance/commission-opinion-c-2017-6810-final en.

See Regulation (EU) 2019/834 of the European Parliament and of the Council of 20 May 2019 amending Regulation (EU) No 648/2012 as regards the clearing obligation, the suspension of the clearing obligation, the reporting requirements, the risk-mitigation techniques for OTC derivative contracts not cleared by a central counterparty, the registration and supervision of trade repositories and the requirements for trade repositories, available here: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R0834&from=EN.

with respect to third-country CCPs: the ones that ESMA does not characterize as systemically important would be classed as Tier 1, while the ones deemed as systemically important or likely to be so would be tagged as Tier 2. When it comes to Tier 1, the proposed changes are minimal in comparison to the existing rules. However, Tier 2 clearinghouses would face additional requirements in order to be recognized, and will be subject to enhanced supervision by the EU. Third-country central counterparties, or some of their clearing services, if characterized as of "substantial systemic importance", would be required to relocate all or part of their clearing business to continue providing their services in the EU.

The core question that remains unanswered at the moment relates to how systemic importance would be measured. The equivalence process is already highly political and discretionary – as already discussed in *Chapter II* – and, therefore, due allowances should be made as to how this process would be carried out in practice.

As a response to this regulatory development, ISDA has expressed serious concerns with respect to the risks associated with a location policy, such as (i) the geographical fragmentation of markets and distortions in competition, (ii) material adverse impacts on the reduction of systemic risk, (iii) added costs, and (iv) reduced market liquidity and efficiency. Additionally, it is highlighted that a location policy could also have negative ramifications among policymakers in other jurisdictions because of its extraterritorial implications.³⁷⁰ For example, CFTC has already expressed its dissatisfaction with a potential location policy that would be able to disrupt global clearing flows.³⁷¹

Overall, it should be noted that the EU location policy, as prescribed in EMIR 2.2, at its face looks quite protectionist and prone to increase fragmentation in global financial market infrastructure. In the policy's defense, the disintegration the EU is experiencing is unprecedented and dealing with sectors of systemic stability, such as the clearing of financial instruments, is not a walk in the park. With this in mind, regulators should be aware that the stability of financial systems is a priority, but at the same time, protecting financial markets'

_

See ISDA, ISDA's response to the Commission's proposed regulation as regards the procedures and authorities involved for the authorization of CCPs and requirements for the recognition of third-country CCPs (the "EC Proposal"), available here: https://www.isda.org/a/EVKDE/ISDA-Response-EMIR-2-Final.pdf; and FIA, ISDA, AFME, Response to ESMA Consultation Paper on: (i) Draft technical advice on criteria for tiering under 25(2a) of EMIR 2.2; and (ii) Technical Advice on Comparable Compliance under article 25a EMIR, available here: https://www.isda.org/a/cIqME/FIA_ISDA_AFME-Final-response-to-tiering-and-comparable-compliance-ESMA-20190729.pdf.

See US CFTC, Statement of Chairman J. Christopher Giancarlo on EMIR 2.2, on 13 March 2019, available here: https://www.cftc.gov/PressRoom/SpeechesTestimony/giancarlostatement031319.

integrity should not negatively impact on the liberalization prospects of the relevant services when there are other less trade restrictive alternatives. Following this, a location policy requiring the establishment of third country financial institution in specific jurisdictions seems like an overly burdensome measure and its consistency with international trade law commitments under the GATS might need to be evaluated.

For the UK, such policy, if implemented and depending on its final shape, might disrupt the clearing flows towards the European Union and, more broadly, might change the market dynamics as we currently know them.

5.4 TENTATIVE CONCLUSIONS ON CLEARING SERVICES – BEFORE BREXIT HAS ACTUALLY OCCURRED

In spite of the uncertainties posed by politicians, financial regulators on both sides seek to minimize as much as possible the potential disruptive effects of a no-deal Brexit for clearing services. As the role of clearinghouses has become more prominent than ever for global financial infrastructure, financial stability and international competitiveness considerations are in the agendas of both the EU and the UK. The regulatory momentum in the EU is to extraterritorially extend its regulatory reach and insulate itself, as much as possible, from any potential negative effects caused by third-country clearinghouses. As developed in *Chapter II*, the process through which equivalence assessments of third-country CCPs have been conducted under EMIR are characterized by large discretion by the EU institutions and they hugely affect the international terms of trade for the provision of clearing services.

Given that international clearing flows are, at least as far as it concerns transactions with the EU, defined by these equivalence assessments, EMIR plays an important role in competition in clearing services. In the same vein, as UK clearinghouses are currently instrumental for the clearing of financial instruments in the EU, the changing of their status (either in the form of third-country CCPs or as relocated entities in the EU) impacts on the terms of trade between the two. Avoiding fragmentation, preserving stability and increasing competition in financial markets are overarching regulatory objectives. Nevertheless, the proportionality and the necessity of the mechanism put forward by the European Union in its proposed location policy might need to be scrutinized for its consistency with both EU and WTO law, once in place.

In sum, Brexit as an unprecedented disintegration event is inevitably going to severely affect how third country clearinghouses, and in particular the UK ones, will supply their services in the European Union. The current state of play cannot offer a complete picture due to the high level of uncertainties associated with Brexit. Nonetheless, it is tentatively supported that on the basis of the three identified criteria relating to the liberalization of clearing services – namely competition in the EU, global competitive landscape, and the EU industry's competitiveness – that the designed system for Brexit alongside with the regulatory amendments of EMIR would be anti-competitive in all the three categories. Once again though, these conclusion is preliminary and, thus, incomplete as it is based on assumptions not yet confirmed.

6. CONCLUDING REMARKS

This *Chapter* has assessed, in a qualitative fashion, the liberalization of CCP clearing services in the context of the EU economic integration model. In addition, it offered considerations in relation to how would such integration be impacted by the advent of Brexit. In carrying out this study, we, firstly, evaluated the degree to which the relevant EU financial regulation and EU antitrust and competition law contribute to the integration of the EU internal market and increase competition in the relevant markets, and, secondly, whether those two legal instruments pose any unwarranted barriers to the international liberalization of the financial services in question. Further, the role of Brexit was factored in this conceptual framework.

Importantly, the main findings of this study are summarized as follows: (i) the EU financial regulation setting out the rules for the operation of financial market infrastructure, namely EMIR together with MiFID II, alongside with the application of EU competition law have consistently promoted the integration of the financial market infrastructure in the European Union; (ii) due to the interconnectedness of financial markets and the inherent characteristics and structure of the EU financial regulation and competition law, the trade-liberalizing effect is not limited to the EU internal market but it, further, extends to global financial institution supplying their services in the EU as a more competitive and open EU market also works in their benefit; and (iii) a preliminary view of the issues surrounding the provision of clearing services in the aftermath of Brexit reveal that such disintegration is likely to negatively impact on the terms of trade and, accordingly, the liberalization between the EU and the UK.

Perhaps more interestingly, this *Chapter*'s analysis begs the question of what are the the comparative advantages that the European Union integration model presents in comparison to the multilateral and the plurilateral trading systems (discussed in *Chapters II* and *III* of this thesis). We argue that the two most important elements that drive the deeper liberalization of financial market infrastructure in general, and securities clearing services in particular, in the EU internal market are (i) the harmonized regulatory environment that seeks to attain a level playing field for market actors and to increase competition, and (ii) the application of competition law in the specific industries that aims to address the effects of monopolization.

The foregoing analysis has shed light on the most prominent driving forces of liberalization of financial market infrastructure services in the European Union. Consequently, since we elaborated on how the liberalization of financial services is attained in three different economic integration models and we have concretely identified the existing barriers and the potentially beneficial aspects that can be utilized if more integration is needed, the next *Chapter* offers policy recommendations and summarizes the main arguments promulgated in this thesis.

PART V: CONCLUSIONS AND POLICY RECOMMENDATIONS

1. EXISTING DISCIPLINES CONTRIBUTING TO THE LIBERALIZATION OF THE FINANCIAL MARKET INFRASTRUCTURE

The present thesis has comprehensively evaluated the interface between financial regulation and economic integration. It did this by bringing forwards an in depth analysis of three case studies investigating the intersection between the regulation of financial market infrastructure and certain economic integration settings — namely, the WTO, Economic Integration Agreements, and EU competition law. The conclusions drawn relate primarily to: (i) how the liberalization of financial market infrastructure is realized; (ii) the existing barriers to trade that may impede the further integration of the markets at issue; and (iii) from a normative perspective, the tools through which more liberalization of the financial market infrastructure can be delivered without jeopardizing the stability and integrity of the financial system. The following paragraphs grasp the essential findings of this thesis.

As evidenced by the foregoing *Chapters*, it emanates from this thesis that the regulatory systems that determine the operations and the integration of financial market infrastructure are by no means one-dimensional. Accordingly, the regulatory and legal disciplines that define how the supply of financial services (and of financial market infrastructure, in particular) is to occur and the extent of their integration are operating at multiple levels. Financial regulation is principally the discipline that lies at the core of setting out the rules for the operation of the financial institutions of market infrastructure in parallel with international standard setting bodies (i.e. the Basel Committee or IOSCO). Nevertheless, the conduct of such institutions is also scrutinized by competition/antitrust law for the purposes of merger review or when there are concerns of anti-competitive conduct (either through cartel-like behavior or through monopolization, as discussed in Part IV). Moreover, due to the prominence of the internationalization of finance, as evidenced by the analysis developed in Part II, financial regulation is not only concerned about putting forward the rules for purely domestic transactions but does also expand its reach on business with a transnational element. That is the point where the boundaries set by international economic law – either at the multilateral level by WTO law or at the plurilateral level by EIAs – kick in (as investigated in Parts II and III, respectively).

Furthermore, this thesis has demonstrated that financial regulation is seminal in liberalizing financial market infrastructure. With respect to how the liberalization of financial market infrastructure is achieved, each one of the above-stated disciplines plays its own unique role on this score.

Firstly, financial regulation has a number of tools to liberalize financial market infrastructure services, as developed in Parts II and IV. At the EU level, financial regulation has consistently and systematically over the last decade put forward provisions in the legislation for financial market infrastructure to increase competition in the provision of such services and to explicitly break up silos existing in the industry (as discussed in Part IV). In this way, financial regulation decisively contributes to the integration of the EU market of financial market infrastructure by inserting explicit provisions in legislations serving this end. Moreover, at the international level financial regulators hold the key to allowing third-country financial institutions to supply their services at the respective jurisdictions, as the case study in Part II has clearly demonstrated. To this end, financial regulation promotes the international integration of financial market infrastructure. This mainly materializes through equivalence or substituted compliance assessments carried out by financial supervisory authorities. In addition, mutual recognition agreements between financial regulatory authorities in relation to the efficacy of financial supervision and enforcement in the relevant states are also important.

Secondly, the findings of this study clearly indicate that there is a positive correlation between the application of competition law and the integration of those markets. As to how competition law and policy foster the liberalization of financial market infrastructure, it is clear from the analysis carried out in Part IV that through the application and enforcement of antitrust and competition law monopolization is directly addressed. In particular, by implementing an efficient concentration control system the EU maintains a – relatively – liberalized financial market infrastructure. As the result of the EU merger control system, there is no single champion that has such a market share that would allow to foreclose the EU market and provide disincentives for foreign institutions to supply their services in the EU internal market. The examples of the two mega mergers that were blocked by the European Commission makes evident that the preservation of integrated markets for financial market infrastructure is a priority of EU competition law. In the same vein, when it comes to antitrust law that could negatively impact on the competitive landscape of financial market infrastructure and would deteriorate the levels of the market's integration, the EU has consistently encountered anticompetitive behaviors. The analysis in Part IV offers specific benchmarks with regards to how

competition law in the European Union contributes to the liberalization of financial market infrastructure in the EU and globally: namely, (i) international competitiveness, (ii) competition in the EU domestic landscape and (iii) competition at the global level.

Thirdly, this thesis provides a comprehensive framework of the ways through which the liberalization of financial market infrastructure occurs under international economic law. The cases of WTO law, on the one hand, and Economic Integration Agreements, on the other, are developed in Part II and Part III, respectively. Most importantly, the liberalization of financial market infrastructure at the multilateral trading system is realized through the disciplines housed in the GATS. In particular, the most-favourable treatment provision (Article II of the GATS) together with prudential carve-out of the GATS Annex on Financial Services are keys in the liberalization of such financial services. In this context, the driving factor that determines the extent to which those markets are liberalized by each WTO Member is the specific commitments entered in their schedules. Therefore, the empirical analysis on Economic Integration Agreements (in Part III) offers an in-depth framework of how precisely the liberalization of financial market infrastructure services is effectuated at the plurilateral trading system. Such liberalization principally occurs through countries' commitments for market access (GATS Article XVI) and national treatment (GATS Article XVII), both at the multilateral and the plurilateral trading systems.

Moreover, on the basis of this thesis' findings, we have identified concrete existing barriers to the further integration of the financial market sector in question. Below, we offer an account of the most important barriers to trade in relation to the supply of financial market infrastructure services flowing from the three economic integration settings evaluated under this study.

2. BARRIERS TO TRADE IN THE WAY OF LIBERALIZING FINANCIAL MARKET INFRASTRUCTURE

At the outset, barriers to trade in financial services can be very different in nature but, broadly speaking, they can be separated between (i) market access and national treatment barriers (i.e. by extending differential treatment to third-country clearinghouses only on the basis of their origin or setting a minimum number of regulated markets operating in a jurisdiction), and (i) non-discriminatory and non-quantitative restrictions (for example, impeding the equality of competitive opportunities for third-country suppliers vis-à-vis domestic institutions by permitting anti-competitive conduct or by adopting regulatory

frameworks that foster the fragmentation of global financial markets without necessarily serving prudential reasons). The former category is directly addressed by the obligations and commitments entered under WTO law and Economic Integration Agreements, which are designed to capture trade barriers of this nature, while the latter category is purely contingent on the political appetite of States in the absence of any internationally binding legal framework. As a result, it hinges on the States' design of financial market infrastructure regulation and their internal market rules whether more or less liberalization would be extended to foreign financial institutions.

The focal point of this thesis lies mainly with the second category, which, *inter alia*, includes barriers to trade embedded in financial regulatory frameworks that even if they might escape from the scrutiny of international trade law disciplines, they still pose obstacles that impede the further integration of financial market infrastructure. The next paragraphs underscore the specific barriers highlighted by the findings of the case studies of this thesis and their ways of discouraging further integration of international trade flows for financial market infrastructure services.

The first case study examining the intersection between domestic financial regulation and WTO law (Chapter II) found that the EU rules on the unilateral recognition of 'thirdcountry' CCPs through the mechanism of the 'equivalence' assessments pose certain procedural fairness and non-discriminatory structural trade barriers in the way of integrating third-country clearinghouses. Specifically, in respect of procedural fairness, discussed in the context of GATS Article VI on Domestic Regulation and GATS Article VII on Mutual Recognition, the analysis underscored that the fact that the third-country regimes of certain countries are assessed for the purposes of evaluating equivalence while the regime of other third-countries are not offered an adequate opportunity to be assessed and, accordingly, their clearinghouses cannot gain access to the EU internal market as their regulatory frameworks have not yet been assessed by the relevant European Union authorities. The most problematic aspects of this pertains to the fact that third-counties with similar levels of efficacy in adopting international standards on the basis of the FSB assessment receive different treatment by EU With regards to non-discriminatory structural barriers relating to the EU regulators. equivalence regimes, this thesis highlighted that there are problems of regulatory transparency that might also be inconsistent with GATS Articles VI and VII. In particular, the fact that the European Commission does not explain the precise way it opts for assessing some third-country regimes while it does not evaluate others is problematic as in the absence of an objective

methodology potential biases or political steering might be entailed. Those trade barriers can significantly impede effective market access by third-country clearinghouses into the EU single market.

The second case study evaluated the underlying characteristics of the liberalization of financial market infrastructure in the context of Economic Integration Agreements (*Chapter III*). This empirical study showed that financial market infrastructure services achieved deeper liberalization at the plurilateral trading system in comparison to the WTO framework. Nevertheless, certain impediments were identified in relation to the extent to which financial regulation in borne in mind by trade negotiators in the negotiation rounds and whether the latest financial regulatory state of play is reflected in the content of international trade agreements and the commitments undertaken by the signatories. In particular, the analysis highlighted that the (i) fact that financial rulebooks that limit cross-border trade flows in financial market infrastructure are not included in EIAs' parties set of reservations/commitments raises problems in terms of the international trade agreements' transparency and, more broadly, exemplifies States' overreliance on the prudential carve-out – also included in EIAs, and (ii) the absence of a mechanism of regularly updating the content and undertaken commitments/reservations under EIAs on the basis of the evolution of financial regulatory rulebooks do not foster the transnational integration of financial market infrastructure

The third case study delved into the economic integration tools of the most liberalized system of countries there is – the intra-EU approach. The analysis shed light on the benefits associated with the (i) efficient application and enforcement of competition law rules, and (ii) the importance of harmonization in achieving integrated financial markets. As to the first element, it is maintained that the majority of States' legal systems have their own domestic set of competition rules that are not intertwined in the same way competition law is structured within the European Union marked. The flip side of this is that in addition to substantive deviations in the text of antitrust laws, the enforcement of competition law is dispersed among national competition authorities which do not defer to a central trustbuster as the EU Member States do to the European Commission for prominent cases extending beyond the borders of a single State. Consequently, the lack of a uniform rulebook for the application of competition rules at the international level coupled with the existence of numerous enforcers investigating international anti-competitive conduct (with limited coordination) creates an impediment in the liberalization of financial market infrastructure, which is by definition international due to

markets interconnectedness. Thus, the non-centralization of competition law at the global level represents a structural barrier to the integration of financial market infrastructure.

The absence of harmonization of financial regulation at the international level is well-known and the prominence and rationale behind the dominance of soft law in international finance has been accentuated by literature. Nevertheless, the fact remains that since the States' rules differ with regards to both the substantive rules on the operation of financial market infrastructure institution and, accordingly, the rules on the recognition of third-country institutions, the integration of financial market infrastructure is impeded. As a result, inevitably financial rulebooks constitute barriers to trade (irrespective of whether they are discriminatory or not as to the service providers of foreign States).

The forthcoming section seeks to develop a normative framework for the further integration of financial market infrastructure at the international level. Once we have taken into consideration the lessons learnt from the thesis probe with respect to the existing barriers to trade, we offer policy recommendations that are capable of contributing to further liberalizing trade in financial market infrastructure services without putting the financial market's integrity at risk should States willingly decide to move towards this direction.

3. PROPOSALS TO ATTAIN FURTHER LIBERALIZATION

As this thesis has identified certain obstacles in the way of further liberalizing financial market infrastructure in the economic integration settings covered by the analytical framework of this thesis, we propose a number of policy recommendations that would be apt for achieving more integration of financial market infrastructure without at the same time putting at risk the stability of the financial system. The recommendations at hand are of (i) substantive, and (ii) procedural nature and would potentially contribute to the global integration of financial services should policy makers decide to commit themselves to this objective. The following recommendations offer solutions both at the national level (e.g. review of national regulatory regimes) and at the international level (e.g. reform proposals at the WTO level or in the context of EIAs). Finally, the proposals are indicative and emanate from the lessons learnt by the findings of this thesis.

3.1 SUBSTANTIVE RECOMMENDATIONS

The proposals of substantive nature at the international level purport to increase the liberalization of financial services without jeopardizing the stability of the financial system by

utilizing the resources of the World Trade Organization. In particular, the substantive recommendations pertain to (i) the establishment of a harmonization forum for certain technical financial regulatory rules (e.g. regimes on equivalence/substituted compliance) under the premises of the WTO, and (ii) the adoption of an international treaty on the application of competition/antitrust rules and the centralization of national competition authorities under a mega-enforcer (e.g. potentially the WTO).

As to the first recommendation, we believe that serious harmonization efforts of key financial regulatory provisions that extend "effective market access", such as the rules on equivalence or substituted compliance, at the multilateral level would contribute to more integration for financial services sectors. Therefore, as long as WTO Members would be interested in discussing together certain rules of their domestic rulebooks in view of reaching a collective outcome, then further liberalization of financial market infrastructure would be warranted as market's fragmentation would decrease, international competitiveness would increase and there would be more liquidity in global markets as the result of those efforts. Of course, financial stability consideration would be borne in mind during those discussions as the persons at the negotiating table would be WTO Members' representatives from the respective financial regulatory/supervisory authorities.

With respect to the second proposal, as discussed in Chapter IV, this thesis demonstrated that there is a positive correlation between the application and enforcement of competition law for the integration of financial market infrastructure in the context of the European Union. Thus, assuming that this model could be replicated at the global level we maintain that the positive effects of competition evidenced in the EU would extend at the global level. A common rulebook in the form of an international treaty on antitrust and deference of national competition authorities to an international enforcing authority is promoted as a normative framework. A common set of antitrust rules under an international treaty would provide clarity at the international level and avoid situations of cherry-picking their conduct on certain jurisdictions. As to making competition enforcement more efficient, this study takes account of the important role of national competition authorities, which would continue to carry out their tasks, but advocates in favor of an international enforcer because of global markets' interconnectedness and the international nature of business. The WTO would be a good candidate to host such discussions due to its prominence in safeguarding the common set of rules on international trade for more than two decades and its developed expertise on economic law matters (such as anti-dumping measures and countervailing duties). Overall, should there be political willingness to promote the internalization of competition law the integration of markets would be a natural consequence.

3.2 PROCEDURAL RECOMMENDATIONS

At the domestic level, to avoid situations where due process considerations are not respected and, therefore, the integration of financial services is not fostered (as discussed in the context of EMIR's equivalence assessments), we recommend that financial regulators when adopting certain rules that affect the transnational trade flows of financial services to accompany them with a publication of a methodology note of how they are to apply those set of rules. In the case raised in *Chapter II* of this thesis, had the Commission published a note indicating the methodology followed in the assessment of third-country regimes, which should put forward objective criteria (based, for instance, on the order of applications for the respective order of evaluating foreign regulatory frameworks), then there would be no problem of due process.

At the international level, in order to ensure that the content of financial regulatory frameworks is constantly updated and reflected in the obligations and the set of commitments/reservations under Economic Integration Agreements, a mechanism of regularly reviewing EIAs is promulgated in order to maximize the potential of integrating the international markets for financial infrastructure by providing regulatory transparency and by offering clarity to trading counterparts as to the specific terms of trade and trade barriers currently in place in relation to the supply of financial services.

* * *

BIBLIOGRAPHY

Aadita Mattoo & Ludger Schuknecht (1999). Trade policies for electronic commerce. The World Bank

Alan O. Sykes, 'Regulatory Protectionism and the Law of International Trade', *University of Chicago Law Review*, 66(1) (1999), 15–33.

Alan O. Sykes, (2007). International trade: trade remedies. *Research Handbook in International Economic Law*, 62-112

Alison Jones, (2010). The Journey toward an Effects-Based Approach under Article 101 TFEU—The Case of Hardcore Restraints. *The Antitrust Bulletin*, 55(4), 783-818

Amandeep Rehlon, & Dan Nixon (2013). Central counterparties: what are they, why do they matter, and how does the Bank supervise them?. *Bank of England Quarterly Bulletin*, Q2.

Americo Zampetti, 'Market Access through Mutual Recognition: The Promise and Limits of GATS Article VII', in P. Sauvé and R. Stern (eds.), GATS 2000: New Directions in Services Trade Liberalization (Washington, DC: Brookings Institution Press, 2000)

Andrea Lista, (2013). EU competition law and the financial services sector. Informa Law from Routledge

Anna Piszcz, (2015). Piecemeal Harmonisation Through the Damages Directive? Remarks on What Received Too Little Attention in Relation to Private Enforcement of EU Competition Law. *Yearbook of Antitrust and Regulatory Studies (YARS)*, vol. 8, no. 12, pp. 79-98

Anu Bradford, Robert J. Jr. Jackson & Jonathan Zytnick, (2018). Is eu merger control used for protectionism? an empirical analysis. *Journal of Empirical Legal Studies*, 15(1), 165-191.

Barry R. Johnston (1998), "Sequencing Capital Account Liberalizations and Financial Sector Reform", IMF Paper on Policy Analysis and Assessment 98/8.

Barry Rider, Kern Alexander, Stuart Bazley, & Jeffrey Bryant, (2016). *Market abuse and insider dealing*. Bloomsbury Publishing

Barry Nalebuff (2004). Bundling as an entry barrier. *The Quarterly Journal of Economics*, 119(1), 159-187.

Bart De Meester, (2010). The Global Financial Crisis and Government Support for Banks: What Role for the GATS?. *Journal of International Economic Law*, 13(1), 27-63.

Bart De Meester, (2008). Testing European Prudential Conditions for Banking Mergers in the Light of Most Favoured Nation in the GATS. *Journal of International Economic Law*, 11(3).

Bart De Meester, *Liberalization of Trade in Banking Services: An International and European Perspective*. Cambridge University Press, 2014

Bernard Hoekman and Carlos A. Primo Braga (1997), 'Protection and Trade in Services: A Survey', Open Economies Review, 8(3), 285–308

Bernard Hoekman & Petros C. Mavroidis (1996). Dumping, antidumping and antitrust. *Journal of World Trade*, 30(1), 27-52.

Bernard M. Hoekman & Petros C. Mavroidis (2015). Embracing diversity: plurilateral agreements and the trading system. *World Trade Review*, 14(1), 101-116.

Bernard M. Hoekman & Petros C. Mavroidis (2015). WTO 'à la carte'or 'menu du jour'? Assessing the Case for More Plurilateral Agreements. *European journal of international law*, 26(2), 319-343

Bruch H. Kobayashi (2005). Does economics provide a reliable guide to regulating commodity bundling by firms? A survey of the economic literature. *Journal of Competition Law & Economics*, 1(4), 707-746.

Carlo Maria Cantore (2018), The Prudential Carve-Out for Financial Services: Rationale and Practice in the GATS and Preferential Trade Agreements (Cambridge: Cambridge University Press).

Charles Goodhart, Philippe Hartmann, David T. Llewellyn, Liliana Rojas-Suarez, & Steven Weisbrod (2013). *Financial regulation: Why, how and where now?*. Routledge

Chad P. Bown, (2009). The global resort to antidumping, safeguards, and other trade remedies amidst the economic crisis. The World Bank

Chris Brummer, (2010). Why soft law dominates international finance—and not trade. *Journal of International Economic Law*, 13(3), 623-643

Chris Brummer, (2010). How international financial law works (and how it doesn't). *Geo. LJ*, 99, 257.

Christian Twigg-Flesner, (2011). 'Good-Bye Harmonisation by Directives, Hello Cross-Border only Regulation?'—A way forward for EU Consumer Contract Law. *European Review of Contract Law*, 7(2), 235-256.

Christine Janssens (2013), Mutual Recognition in the European Union, Oxford University Press

Claus-Dieter Ehlermann, & Lothar Ehring, (2002). WTO Dispute Settlement and Competition Law: Views from the Perspective of the Appellate Body's Experience. *Fordham Int'l LJ*, 26, 1505.

Constance Z. Wagner (1999), "The New WTO Agreement on Financial Services and Chapter 14 of NAFTA: Has Free Trade in Banking Finally Arrived?", NAFTA: Law and Business Review of the Americas

Craig Pirrong, 'The Economics of Central Clearing: Theory and Practice (ISDA, Discussion Paper Series No. 1, 2011).

Damien Gerard, (2008). Managing the financial crisis in Europe: Why competition law is part of the solution, not of the problem. *Global Competition Review, December*.

Dane Holbrook (2002), International Merger Control Convergence: Resolving Multijurisdictional Review Problems, *UCLA Journal International Law & Foreign Affairs*, 7, 345.

Danny Busch, (2016). MiFID II: regulating high frequency trading, other forms of algorithmic trading and direct electronic market access. *Law and financial markets review*, 10(2), 72-82

David Howarth, & Lucia Quaglia, (2018). Brexit and the battle for financial services. *Journal of European public policy*, 25(8), 1118-1136

David A. Lipton, (1981), Best Execution: The National Market System's Missing Ingredient. *Notre Dame Law*, 57, 449

David T Llewellyn T. (1999). *The economic rationale for financial regulation*. London: Financial Services Authority.

David Ricardo, Principles of political economy and taxation. G. Bell, 1891.

Delphine Nougayrède, (2018). Towards a Global Financial Register? The Case for End Investor Transparency in Central Securities Depositories. *Journal of Financial Regulation*, 4(2), 276-313

Dermot Turing (2016). Clearing and Settlement. Bloomsbury Publishing.

Diehl Martin, Heild Christoph, & Tobiasch Katharina, (2019). The consolidation of TARGET2 and TARGET2-Securities: How is the Eurosystem exploring synergies across its infrastructures, and how will this impact day-to-day operations? *Journal of Securities Operations & Custody*, 11(3), 198-212.

Elias G. Kazarian, (2006). *Integration of the securities market infrastructure in the European Union: policy and regulatory issues* (No. 6-241). International Monetary Fund.

Emad Tinawi & Judson O. Berkey (1999). E-services and the WTO: the adequacy of the GATS classification, OECD, available here: www. oecd. org/dsti/sti/it/ec/act/paris ec/pdf/gatsfin. pdf [24 May 2001]

Emilios Avgouleas, (2000). The Harmonisation of Rules of Conduct in EU Financial Markets: Economic Analysis, Subsidiarity and Investor Protection. *European Law Journal*, *6*(1), 72-92

Federico Ferretti, (2014). EU competition law, the consumer interest and data protection: The exchange of consumer information in the retail financial sector. Springer

Federico Ortino, (2006). treaty interpretation and the WTO appellate body report in US–Gambling: a critique. Journal of International Economic Law, 9(1), 117-148.

Federico Della Negra (2019), MiFID II and Private Law: Enforcing EU Conduct of Business Rules, Hart Publishing

Felix B. Chang, 'The Systemic Risk Paradox: Banks and Clearinghouses under Regulation', *Columbia Business Law Review* (2014), 14–06, p.747.

Fernando Cerezetti V., Emmanouil N. Karimalis, Ujwal Shreyas & Anannit Sumawong (2019). Market liquidity, closeout procedures and initial margin for CCPs. *The European Journal of Finance*, *25*(7), 599-631.

Florian Wagner-von Papp, (2012), Competition law and Extraterritoriality, *Research Handbook on International Competition*, Edward Elgar Publishing.

Frank P. Maier-Rigaud, (2014). Toward a European Directive on damages actions. *Journal of Competition Law and Economics*, vol. 10 no. 2, pp. 341-360.

Frederik Erixon, & Razeen Sally, (2010). *Trade, globalisation and emerging protectionism since the crisis* (No. 02/2010). ECIPE working paper.

Froukelien Wendt, (2015). Central counterparties: addressing their too important to fail nature (No. 15-21).

FSB, 'OTC Derivatives Market Reforms: Thirteenth Progress Report on Implementation' (19 November 2018), available here: https://www.fsb.org/wp-content/uploads/P191118-5.pdf (lastly accessed on 12 August 2019).

Gerda Falkner, Oliver Treib, Miriam Hartlapp, & Simone Leiber (2005). *Complying with Europe: EU harmonisation and soft law in the member states*. Cambridge University Press

George A. Papaconstantinou (2019), The GATS and Financial Regulation: Time to Clearhouse?, *World Trade Review*, 1-23, available https://doi.org/10.1017/S1474745619000181.

George A. Papaconstantinou (2016), Investment bankers in conflict: the regime of inducements in MiFID II and the member states' struggle for fairness. *European Review of Contract Law*, vol.12, no. 4, pp. 356-390.

George A. Papaconstantinou (2018), "Clearing & Settlement" by D Turing, Book review, European Law Review, vol. 42, no. 1.

Geza Feketekuty, (2000) 'Regulatory Reform and Trade Liberalization in Services', in P. Sauvé and R. M. Stern (eds.), Services 2000: New Directions in Services Trade Liberalization

Gina-Gail S.Fletcher, (2016). Benchmark regulation. *Iowa L. Rev.*, 102, 1929

Giorgio Monti, (2010). Article 82 EC: what future for the effects-based approach?, *Journal of European Competition Law & Practice*, *I*(1), 2-11.

Goncalves, Marilyne Pereira, and Constantinos Stephanou. "Financial services and trade agreements in Latin America and the Caribbean: an overview." World Bank Policy Research Working Paper 4181, April 2007

Graciela Kaminsky & Sergio Schmukler (2002). Short-run pain, long-run gain: the effects of financial liberalization. The World Bank

Guido Ferrarini & Niamh Moloney (2012), Reshaping order execution in the EU and the role of interest groups: from MiFID I to MiFID II. *European Business Organization Law Review (EBOR)*, vol. 13, no.4, pp. 557-597

Guido Ferrarini, (Ed.). (1998), European Securities Markets: the investment services directive and beyond. Kluwer Law International BV

Guido Ferrarini, (2007). Best execution and competition between trading venues—MiFID's likely impact. Capital Markets Law Journal, 2(4), 404-413

Guy Karsenty, (2000). Assessing trade in services by mode of supply. GATS 2000: New Directions in Services Trade Liberalization, 33-56.

Hester Peirce (2015). Derivatives Clearinghouses: Clearing the Way to Failure. Clev. St. L. Rev., 64, 589.

Ilias Kapsis. (2012). Competition law and policy for the EU banking sector in a period of increased economic uncertainty. *International Journal of Law and Management*, 54(4), 284-301

International Monetary Fund; Cyril Monnet, (2010). Let's make it clear: How central counterparties save (d) the day. Federal Reserve Bank of Philadelphia Business Review, 1, 1-10.

Ian Sheridan, (2017). MiFID II in the context of Financial Technology and Regulatory Technology. *Capital Markets Law Journal*, 12(4), 417-427

Ioannis Lianos, Philipp Hacker, Stefan Eich & Georgios Dimitropoulos (Eds.). (2019). Regulating Blockchain: Techno-Social and Legal Challenges. Oxford University Press.

ISDA, 'White Paper: Cross-Border Harmonization of Derivatives Regulatory Regimes' (September 2017).

James Bullard, Christopher Neely, & David Wheelock (2009). Systemic risk and the financial crisis: a primer. Federal Reserve Bank of St. Louis Review, 91(September/October 2009)

James Crotty (2009). Structural causes of the global financial crisis: a critical assessment of the 'new financial architecture'. Cambridge journal of economics, 33(4), 563-580

James Crotty, & Gerald Epstein (2008). Proposals for effectively regulating the US financial system to avoid yet another meltdown (No. 2008-15). Working Paper.

Jagdish Bhagwati, 'The Pure Theory of International Trade: A Survey', The Economic Journal, 74(293) (1964), 18.

Jennifer Hillman, (2019), Three Approaches to Fixing the World Trade Organization's Appellate Body: The Good, The Bad, and the Ugly, working paper, Institute for International Economic Law, Georgetown University Law Center.

Jesper Lau Hansen, (2017). Market Abuse Case Law-Where Do We Stand With MAR?. *European Company and Financial Law Review*, 14(2), 367-390.

Jo-Ann Crawford & Roberto V. Fiorentino (2005): The changing landscape of regional trade agreements, WTO Discussion Paper, No. 8, ISBN 9287033269, World Trade Organization (WTO), Geneva

John Armour, (2017). Brexit and financial services. Oxford Review of Economic Policy, 33(suppl_1), S54-S69

John E Kwoka & Diana L. Moss (2012). Behavioral Merger Remedies: Evaluation and Implications for Antitrust Enforcement. *The Antitrust Bulletin*, 57(4), 979-1011

John Wiley & Sons; Simon Grima (2012). The current financial crisis and derivative misuse. Online Journal of Social Sciences Research, 1(8), 265-276.

Joseph P. Griffin (1999), Extraterritoriality in US and EU Antitrust Enforcement, Antitrust Law Journal, 67, 159

Joseph H. H. Weiler, (2005) Mutual Recognition, Functional Equivalence and Harmonization in the Evolution of the European Common market and the WTO, in The Principle of Mutual Recognition in the European Integration Process 25 (Fiorella Kostoris Padoa Schippoa eds.)

Joseph Wilson, (2003). Globalization and the limits of national merger control laws. Kluwer Law International BV

Joseph Farrell & Michael L. Katz (2006). The economics of welfare standards in antitrust, 2 Competition Policy International 15.

Juan A. Marchetti (2015). Technical standard-setting in the financial sector. In Panagiotis Delimatsis (Ed.), *The Law, Economics, and Politics of International Standardisation* (Cambridge International Trade and Economic Law, pp. 137-159). Cambridge: Cambridge University Press.

Juan A. Marchetti and Petros C. Mavroidis, 'The Genesis of the GATS', European Journal of International Law, 22(3) (2011), 689–721.

Juan A. Marchetti and Petros C. Mavroidis. 'I now recognize you (and only you) as equal: An anatomy of (mutual) recognition agreements in the GATS', Regulating Trade in Services in the EU and the WTO (Cambridge: Cambridge University Press, 2012

Juan A. Marchetti, 2011. "Do PTAs Actually Increase Parties' Services Trade?", in Bagwell, and Mavroidis (eds.), Preferential Trade Agreements: A Law and Economics Analysis. Cambridge University Press

Juan Luis Moreno-Villalaz, (2005). Financial integration and dollarization: The case of Panama. Cato J., 25, 127.

Judson O. Berkey, A Framework Agreement for Electronic Commerce Regulation under the GATS, 1-2 (Institute for International Finance, 2001)

Julia Lee Allen. (2012). Derivatives clearinghouses and systemic risk: a bankruptcy and Dodd-Frank analysis. *Stan. L. Rev.*, 64, 1079

Kalypso Nicolaidis and Joel Trachtman, 'From Policed Regulation to Managed Recognition: Mapping the Boundary of GATS', in Joel Trachtman, The International Economic Law Revolution and the Right to Regulate (London: Cameron May, 2006)

Kalypso Nicolaidis, (2017) 'The Cassis Legacy: Kir, Banks, Plumbers, Drugs, Criminals and Refugees' in B. Davies and F. Nicola (eds.), European Law Stories: Critical and Contextual Histories of European Jurisprudence, Cambridge University Press

Kalypso Nicolaidis, (2017) 'Mutual Recognition: Promise and Denial, from Sapiens to Brexit', *Current Legal Problems*, vol. 70, no. 1, pp. 1-40

Karel Lannoo, (2016). EU financial market access after Brexit. *Intereconomics*, 51(5), 255-260

Katja Langenbucher (2019). Heinz-Dieter Assmann/Uwe H. Schneider/Peter O. Mülbert, (Hrsg.), Wertpapierhandelsrecht, Kommentar. ZHR: Zeitschrift für das gesamte Handelsrecht und Wirtschaftsrecht, 183(4), 503-508.

Kenneth D. Garbade & William L. Silber (1982). Best execution in securities markets: An application of signaling and agency theory. *The Journal of Finance*, 37(2), 493-504

Kern Alexander, (2008). Global financial standard setting, the G10 committees, and international economic law. *Brook. J. Int'l L.*, 34, 861.

Kern Alexander, Catherine Barnard, Eilis Ferran, Andrew Lang, & Niahm Moloney (2018). *Brexit and financial services: law and policy*. Bloomsbury Publishing

Kevin Werbach (2018). Trust, but verify: Why the blockchain needs the law. Berkeley Tech. LJ, 33, 487.

Khurram Shahzad, & Gerrard Mertens, (2017). The European Market Abuse Directive: Has it Worked?. *Journal of International Financial Management & Accounting*, 28(1), 27-69

Kristin Johnson, Frank Pasquale & Jennifer Chapman (2019). Artificial Intelligence, Machine Learning, and Bias in Finance: Toward Responsible Innovation. Fordham Law Review, 88(2), 499

Kyle Bagwell and Robert W. Staiger. 1999. An economic theory of GATT. *American Economic Review* 89

Kyle Bagwell and Robert W. Staiger, 2001. Reciprocity, nondiscrimination and preferential trade agreements in the multilateral trading system. *European Journal of Political Economy* 17

Kyle Bagwell and Robert W. Staiger, 2002, The Economics of the World Trading System, MIT Press

Kyle Bagwell, George A. Bermann, & Petros C. Mavroidis (Eds.). (2009). *Law and economics of contingent protection in international trade*. Cambridge University Press.

Lars Hendrik Röller, & Olivier Stehmann, (2006). The year 2005 at DG competition: The trend towards a more effects-based approach. *Review of Industrial Organization*, 29(4), 281-304.

Luca Prete (2018), On Implementation and Effects: The Recent Case-law on the Territorial (or Extraterritorial?) Application of EU Competition Rules, *Journal of European Competition Law & Practice*, 9(8), 487-495.

Lucia Quaglia, 'The Politics of "Third Country Equivalence" in Post-Crisis Financial Services Regulation in the European Union', West European Politics, 38(1) (2015), 167–184.

Luis Miguel P. P. Maduro, (1998). We the Court: The European Court of Justice and the European Economic Constitution. Bloomsbury Publishing

Mannin Gilbert Warren III, (1994), The European Union's Investment Services Directive. *U. Pa. j. Int'l Bus. L.*, vol. *15*, p. 181

Marco Lamandini, (2018). Recovery and Resolution of CCPs: Obsessing over regulatory symmetry? (No. 13808). Centre for European Policy Studies

Markus Brunnermeier, Andrew Crockett, Charles A. Goodhart, Avinash Persaud, and Hyun Song Shin. (2009). The fundamental principles of financial regulation (Vol. 11). ICMB, International Center for Monetary and Banking Studies

Mario Antonio Marconini, (2006). Services in regional agreements between Latin American and developed countries (Vol. 71). United Nations Publications

Mark J. Roe (2013). Clearinghouse overconfidence. Calif. L. Rev., 101, 1641

Martin Roy, Juan Marchetti & Hoe Lim (2007). Services liberalization in the new generation of preferential trade agreements (PTAs): how much further than the GATS?. World Trade Review, 6(2), 155-192.

Martin Roy, Juan Marchetti, and Hoe Lim, 2008. "The Race Towards Preferential Trade Agreements in Services: How Much is Really Achieved?," in Panizzon, Pohl, and Sauve, (eds.), *The GATS and International Regulation of Trade in Services*. New York: Cambridge University Press

Maurisz Szpringer & Wlodgimiersz Szpringer (2016). Law and Economics of Central Counterparties (CCP) – Selected Issues of Regulation and Competition Concerning Financial Market Infrastructure. *European Business Law Review*, 27(5), 587-603

Michael Reynolds, Sarah Macrory, & Michelle Chowdhury (2009). EU competition policy in the financial crisis: extraordinary measures. *Fordham Int'l LJ*, 33, 1670

Michael Greenberger (2010). The role of derivatives in the financial crisis. Testimony before the Financial Crisis Inquiry Commission

Michitaka Nakatomi (2013). Plurilateral Agreements: A viable alternative to the WTO?. The Future of the World Trading System: Asian Perspectives.

Miriam Driessen-Reilly, (2015). Private damages in EU competition law and arbitration: a changing landscape. *Arbitration International*, 31(4), 567-587

Myron Scholes (2010). Regulating Wall Street: The Dodd-Frank Act and the new architecture of global finance (Vol. 608).

Neal L. Wolkoff and Jason B. Werner (2010), "History of Regulation of Clearing in the Securities and Futures Markets, and Its Impact on Competition, The," *Rev. Banking & Fin. L.* 30

Niamh Dunne, (2015). Courage and compromise: the Directive on Antitrust Damages. *European Law Review*, 2015, no. 4

Niamh Moloney, (2011). I. Reform or Revolution? The Financial Crisis, EU Financial Markets Law, and The European Securities and Markets Authority. *International & Comparative Law Quarterly*, 60(2), 521-533.

Niamh Moloney, (2011). The European securities and markets authority and institutional design for the EU financial market—a tale of two competences: part (1) rule-making. *European Business Organization Law Review (EBOR)*, 12(1), 41-86.

Niamh Moloney, (2011). The European securities and markets authority and institutional design for the EU financial market—a tale of two competences: part (2) rules in action. European Business Organization Law Review (EBOR), 12(2), 177-225.

Niahm Moloney, (2016). Financial services, the EU, and Brexit: an uncertain future for the city?. *German Law Journal*, 17(S1), 75-82

Nicholas Levy, Alexander Waksman, & Lanto Sheridan, (2019). Global merger control—where to now?. *Journal of Antitrust Enforcement*

Norman S. Poser, (1992), Automation of Securities Markets and the European Community's Proposed Investment Services Directive. *Law & Contemp. Probs.*, vol. 55, p. 29.

Olly Jackson, (2018). Could EU go down the equivalence route for London CCPs?. *International Financial Law Review*

Okeoghene Odudu (2008). The Distributional Consequences of Antitrust in Marsden, P. (Ed.). (2008). Handbook of research in trans-Atlantic antitrust. Edward Elgar Publishing, ch. 23.

Oz Shy, (2001), The economics of network industries, Cambridge University Press.

Panagiotis Delimatsis, (2006). Don't Gamble with GATS—The Interaction between Articles VI, XVI, XVII and XVIII GATS in the Light of the US—Gambling Case. *Journal of world trade*, 40(6), 1059-1080.

Panagiotis Delimatsis, (2007). 'Due Process and "Good" Regulation Embedded in the GATS – Disciplining Regulatory Behaviour in Services Through Article VI of the GATS', *Journal of International Economic Law*, 10, 20–28

Panagiotis Delimatsis. (2007), International Trade in Services and Domestic Regulations: Necessity, Transparency, and Regulatory Diversity (Oxford University Press).

Panagiotis Delimatsis, (2010) 'Concluding the WTO Services Negotiations on Domestic Regulation – Hopes and Fears', *World Trade Review*, 9(4), 643–673.

Panagiotis Delimatsis, & Pierre Sauvé, (2010). Financial services trade after the crisis: Policy and legal conjectures. *Journal of International Economic Law*, 13(3), 837-857.

Panagiotis Delimatsis, (2012). Financial innovation and prudential regulation: The new Basel III rules. *Journal of World Trade*, 46(6), 1309-1342.

Panagiotis Delimatsis, (2013). Transparent financial innovation in a post-crisis environment. *Journal of International Economic Law*, 16(1), 159-210.

Panagiotis Delimatsis and Bernard Hoekman (2018), 'National Tax Regulation, Voluntary International Standards, and the GATS: Argentina–Financial Services', World Trade Review, 17(2).

Panagiotis Delimatsis, & Nils Herger, (Eds.). (2011). Financial regulation at the crossroads: Implications for supervision, institutional design and trade. Kluwer Law International BV.

Paul L. Joskow (2002). Transaction cost economics, antitrust rules, and remedies. *Journal of Law, Economics, and Organization*, 18(1), 95-116

Paul Nihoul, (2014). The ruling of the General Court in Intel: towards the end of an effect-based approach in European competition law?. *Journal of European Competition Law & Practice*, 5(8), 521-530

Peter Yeoh (2017). Regulatory issues in blockchain technology. Journal of Financial Regulation and Compliance, 25(2), 196-208

Petros C. Mavroids & Damien J. Neven, (2006), El mess in TELMEX: a comment on Mexico-measures affecting telecommunication services, *World Trade Review*, vol. 5, no. 2, pp. 271-296.

Petros C. Mavroidis & Bernard Hoekman (2019), Burning Down the House? The Appellate Body in the Centre of the WTO Crisis, Robert Schuman Center for Advanced Studies Research Paper, RSCAS no 56.

Per Helllstrom, Frank Maier-Rigaud & Friedrich Wenzel Bulst (2009). Remedies in European antitrust law. *Antitrust Law Journal*, 76, 43

Philip Chang, Guy Karsenty, Aaditya Mattoo, & Jiirgen Richtering, (1999). GATS, the Modes of Supply and Statistics on Trade in Services. *Journal of World Trade*, 33(3), 93-115

Pierre Schammo, (2011). The European Securities and Markets Authority: lifting the veil on the allocation of powers. *Common Market Law Review*, 48(6), 1879-1913

Pierre Schammo (2018). Caught in a cross-fire? the US CFTC and the European Commission's proposals on third-country CCPs. *Company lawyer.*, 39(9), 277-278.

Rachel Brewster, (2018), The Trump Administration and the Future of the WTO, *Yale Journal of International Law Online*.

Regis Bismuth, (2010). Financial sector regulation and financial services liberalization at the crossroads: The relevance of international financial standards in WTO law. *Journal of World Trade*, 44(2), 489-514.

Richard E. Baldwin, John McLaren, & Arvind Panagariya, (2000). Regulatory protectionism, developing nations, and a two-tier world trade system [with comments and discussion]. In Brookings trade forum (pp. 237-293). Brookings Institution Press.

Richard Baldwin, 1985. The Political Economy of U.S. Import Policy. Cambridge: MIT Press

Richard Whish & David Bailey (2018). Competition law. Oxford University Press, USA

Robert M. Stern (2002), 'Quantifying Barriers to Trade in Services', *Development, Trade, and the WTO: A Handbook. Washington, DC: The World Bank.*

Robert Pitofsky, Donna Patterson, & Jonathan Hooks (2002). The essential facilities doctrine under us antitrust law. *Antitrust Law Journal*, 70, 443.

Robert W. Staiger, 2002, The Economics of the World Trading System, MIT Press

Robert J. Shiller (2012). The subprime solution: How today's global financial crisis happened, and what to do about it. Princeton University Press

Rudolf Adlung, & Aaditya Mattoo, (2008). 2 The GATS. A handbook of international trade in services, 48.

Sacha Wunsch-Vincent 5 (2006), 'The Internet, Cross-Border Trade in Services, and the GATS: Lessons from US- Gambling, *World Trade Review*, 5, 326

Saul Estrin & Peter Holmes, (1998). Competition and economic integration in Europe. Edward Elgar

Sebastian Peyer, (2016). Compensation and the Damages Directive. *European Competition Journal*, vol. 12, no. 1, pp. 87-112

Sergio Schmukler & Graciela Kaminsky (2003). Short-Run Pain, Long-Run Gain: The Effects of Financial Liberalization (No. 3-34). International Monetary Fund.

Simon Deakin, (2000). Regulatory competition versus harmonisation in European Company law. ESRC Centre for Business Research, Department of Applied Economics, University of Cambridge

Shaofang Li, (2018). Competition in the clearing and settlement industry. In *Financial Institutions in the Global Financial Crisis* (pp. 105-167). Springer, Singapore.

Sharif Bhuiyan, 'Mandatory and Discretionary Legislation: The Continued Relevance of the Distinction under the WTO', *Journal of International Economic Law*, 5(3) (1 August 2002), 571–604

Sydney J. Key, *The Doha Round and financial services negotiations*. American Enterprise Institute, 2003.

Stefan Grundmann (2008). The Fault Principle as the Chameleon of Contract Law: A Market Function Approach. *Michigan. Law Review*, 107, 1583

Stefan Grundmann (2013). The Bankinter case on MIFID regulation and contract law. European Review of Contract Law, 9(3), 267-280

Stefan Grundmann (Ed.). (2015). *Bankvertragsrecht 1: Organisation des Kreditwesens und Bank-Kunden-Beziehung*. Walter de Gruyter GmbH & Co KG.

Stefan Grundmann (2016). Bankvertragsrecht: Investment Banking II. Walter de Gruyter GmbH & Co KG.

Stefan Grundmann (2018). Das grundlegend reformierte Wertpapierhandelsgesetz– Umsetzung von MiFID II (Conduct of Business im Kundenverhältnis). Zeitschrift für Bankrecht und Bankwirtschaft, 30(1), 1-19

Stephen J. Lubben (2015). Failure of the Clearinghouse: Dodd-Frank's Fatal Flaw. Va. L. & Bus. Rev., 10, 127

Stijn Claessens, Luc Laeven, Denis Igan, & Giovanni Dell'Ariccia (2010). Lessons and policy implications from the global financial crisis (No. 10-44). International Monetary Fund

Stijn Claessens, Aydan Kose, Luc Laeven & Fabian Valencia (2014). Financial crises: Causes, consequences, and policy responses. International Monetary Fund

Stijn Claessens and Marion Jansen eds. (2000), The Internationalization of Financial Services: Issues and Lessons for Developing Countries, The World Bank and WTO

Tania Voon, & Alan Yanovich, (2005). What is the Measure at Issue? Challenges and Prospects for the WTO, Andrew Mitchell, ed., Cameron May Ltd.).

Thomas Cottier, & Marcus Krajewski, (2010). What Role for Non-Discrimination and Prudential Standards in International Financial Law?. *Journal of international economic law*, 13(3), 817-835.

Thomas Sullivan (2003). Antitrust Remedies in the US and EU: Advancing a Standard of Proportionality. *The Antitrust Bulletin*, 48(2), 377-425

United Nations Conference on Trade & Development, 'A Positive Agenda for Developing Countries: Issues for Future Trade Negotiations' (2000). 463.

Usman Ahmed, Brian Bieron, & Gary Horlick (2015). Mode 1, Mode 2, or Mode 10: How Should Internet Services Be Classified in the Global Agreement on Trade in Service. *Boston University International Law Journal*

Wei Wang (2011). Structural remedies in EU antitrust and merger control. World Competition, 34(4), 571-596.

William E. Kovacic (1998). Designing antitrust remedies for dominant firm misconduct. *Conn. L. Rev*iew, 31, 1285.

William E. Kovacic, & Carl Shapiro (2000). Antitrust policy: A century of economic and legal thinking. Journal of Economic perspectives, 14(1), 43-60

William J. Baumol, & John C. Panzar & Robert D. Willig (1982), *Contestable Markets and the Theory of Industry Structures*, New York.

Wolf-Georg Ringe, (2018). The irrelevance of Brexit for the European financial market. *European Business Organization Law Review*, 19(1), 1-34.

Wonnie Song (2017). Bullish on Blockchain: Examining Delaware's Approach to Distributed Ledger Technology in Corporate Governance Law and Beyond. Harv. Bus. L. Rev. Online, 8, 9

Wouter PJ Wils, (2014). The Judgment of the EU General Court in Intel and the so-called more economic approach to abuse of dominance. *World Competition*, 37(4), 405-434.

WTO, Trade in Services, 'Decision on Domestic Regulation', S/L/70, 28 April 1999.

WTO, WPDR, 'Report on the Meeting Held on 11 May 2001', S/WPDR/M/11, 7 June 2001

WTO, Council for Trade in Services, Committee on Trade in Financial Services, S/C/W/312, S/FIN/W/73, 3 February 2010

Xavier Vives, (2016) Competition and Stability in Banking: The Role of Regulation and Competition Policy, Princeton University Press.

Yesha Yadav and Dermot Turing, 'The Extraterritorial Regulation of Clearinghouses', *Journal of Financial Regulation*, 2(1) (2016), 46–52.

Yesha Yadav, (2012). The problematic case of clearinghouses in complex markets. Geo. LJ, 101, 387.

Yesha Yadav (2014). Clearinghouses and regulation by proxy. Ga. J. Int'l & Comp. L., 43, 161.

Table 6: Clearing & Settlement Services commitments in EIAs

RTA	RTA Name	Parties	Li	isti	FS	Entry	C	Commitments		Commi	Comments on MA, NT, AC
No			ap	g opr ich	Coverage	into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth	
	ASEAN - Australia - New Zealand	Australia New Zealand Singapore	P / N P P	U F S U U X	Yes	01-Jan- 10	None (2),(3) None (2),(3) None (2)	None (2),(3) None (2)		GATS GATS	MA: (1) Unbound, except for the provision of settlement and clearing services for financial assets which are listed on overseas exchanges only. (3) These measures are also limitations on national treatment. Settlement and clearing services for exchange traded securities and financial futures can only be provided by Central Depository (Pte) Limited and SGX-DT respectively. Only one clearing house established under the Banking Act may provide clearing services for Singapore dollar cheques and interbank fund transfer.
		Cambodia	P	X			None (2)	None (1),(2),(3)		GATS	
		Burma	P	X			No commitm	nents on clearing s	ervices	GATS	
		Philippines	P	X			No commitm	nents on clearing s	ervices	GATS	

RTA	RTA Name	Parties	Li	isti	FS	Entry	Commitments			Commi	Comments on MA, NT, AC
No				into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth			
		Viet Nam	P	X			None (2),(3)	None (2),(3)		GATS	
		Thailand	P	X			No commitm	ents on clearing s	services	GATS	
		Malaysia	P	X			No commitm	ents on clearing s	services	GATS	
		Indonesia	P	X			No commitm	ents on clearing s	services	GATS	
		Brunei	P	X			No commitm	ents on clearing s	services	GATS	
		LAOS	P	X			No commitm	ents on clearing s	services	GATS	
2	ASEAN - China				Yes	01-Jul- 07					
		China	P	X			No commitm	ents on clearing s	services	GATS minus	
		Singapore	P	X			None (2)	None (2)		GATS	MA: (1) Unbound, except for the provision of settlement and clearing services for financial assets which are listed on overseas exchanges only. (3) These measures are also limitations on national treatment. Settlement and clearing services for exchange traded securities and financial futures can only be provided by Central Depository (Pte) Limited and SGX-DT respectively. Only one clearing house established under the Banking Act may provide clearing services for Singapore dollar cheques and interbank fund transfer.

RTA	RTA Name	Parties	Li	isti	FS	Entry	Commitments			Commi	Comments on MA, NT, AC
No			ap	g pr ich	Coverage	into force	Mode (1) MA	Mode (2) NT	Mode (3)	tments' depth	
		Cambodia	P				None (2)	None (1),(2),(3)		GATS	
		Burma	P	X			No commitments on clearing services			GATS	
		Philippines	P	X			No commitments on clearing services			GATS	
		Viet Nam	P	X			None (2),(3) None (2),(3)			GATS	
		Thailand	P	X			No commitments on clearing services			GATS	
		Malaysia	P	X			No commitm	No commitments on clearing services		GATS	
		Indonesia	P	X			No commitm	ents on clearing s	services	GATS	
		Brunei	P	X			No commitm	ents on clearing s	services	GATS	
		LAOS	P	X			No commitm	ents on clearing s	services	GATS	
3	ASEAN - India				Yes	01-Jul- 15					
		India (-2)	P	X			No commitm	ents on clearing s	services	GATS	
		India - Indo	P	X			No commitments on clearing services			GATS	
		India - Phil	P	X			No commitments on clearing services			GATS	

RTA	RTA Name	Parties	Li	sti	FS	Entry	C	ommitments		Commi	Comments on MA, NT, AC
No			ap	g pr ch	Coverage	into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth	
		Singapore	P	X			None (2)	None (2)		GATS	MA: (1) Unbound, except for the provision of settlement and clearing services for financial assets which are listed on overseas exchanges only. (3) These measures are also limitations on national treatment. Settlement and clearing services for exchange traded securities and financial futures can only be provided by Central Depository (Pte) Limited and SGX-DT respectively. Only one clearing house established under the Banking Act may provide clearing services for Singapore dollar cheques and interbank fund transfer.
		Cambodia	P	X			None (2)	None (1),(2),(3)		GATS	MA: (3) Unbound until the Government of Cambodia determines what types of entities can conduct these services, the related laws and regulation are established, and such business is authorized by the government or other relevant designated authority.
		Burma	P	X			No commitm	ents on clearing s	ervices	GATS	
		Philippines	P	X			No commitm	ents on clearing s	ervices	GATS	
		Viet Nam	P	X			None (2),(3)	None (2),(3)		GATS	
		Thailand	P	X			No commitm	ents on clearing s	ervices	GATS	

RTA	RTA Name	Parties	Li	isti	FS	Entry	C	ommitments		Commi	Comments on MA, NT, AC
No			ap	ng Coverage appr oach		into force	Mode (1) MA	Mode (2) NT	Mode (3)	tments' depth	
		Malaysia	P	• X			No commitments on clearing services			GATS	
		Indonesia	P	X			No commitm	No commitments on clearing services			
		Brunei	P	X			No commitm	ents on clearing	services	GATS	
		LAOS	P	X			No commitm	ents on clearing	services	GATS	
4	ASEAN - Korea, Republic of	Korea	P	X	Yes	14- Oct-10	No commitm	ents on clearing s	services	GATS	
		Singapore	P	X			None (2)	None (2)		GATS	MA: (1) Unbound, except for the provision of settlement and clearing services for financial assets which are listed on overseas exchanges only. (3) These measures are also limitations on national treatment. Settlement and clearing services for exchange traded securities and financial futures can only be provided by Central Depository (Pte) Limited and SGX-DT respectively. Only one clearing house established under the Banking Act may provide clearing services for Singapore dollar cheques and interbank fund transfer.

RTA	RTA Name	Parties	Li	sti	FS	Entry	C	ommitments		Commi	Comments on MA, NT, AC
No			ap	g pr ch	Coverage	into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth	
		Cambodia	P	X			None (2)	None (1),(2),(3)		GATS	MA: (3) Unbound until the Government of Cambodia determines what types of entities can conduct these services, the related laws and regulation are established, and such business is authorized by the government or other relevant designated authority.
		Burma	P	X			No commitm	ents on clearing s	services	GATS	
		Philippines	P	X			No commitm	ents on clearing s	services	GATS	
		Viet Nam	P	X			None (2),(3)	None (2),(3)		GATS	
		Thailand	P	X			No commitm	ents on clearing s	services	GATS	
		Malaysia	P	X			No commitm	ents on clearing s	services	GATS	
		Indonesia	P	X			No commitm	ents on clearing s	ervices	GATS	
		Brunei	P	X			No commitm	ents on clearing s	services	GATS	
		LAOS	P	X			No commitm	ents on clearing s	services	GATS	
5	Australia - Chile				Yes	06- Mar-09					
		Australia	N	Х			None (2)	None (2),(3)		GATS plus	

RTA	RTA Name	Parties	Li	sti	FS	Entry	C	ommitments		Commi	Comments on MA, NT, AC
No			ap	g pr ch	°	into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth	
		Chile	N	X			None (2)	None (2),(3)		GATS extra	Annex III: Section 2: MA: (3) Sector: Financial Services; Subsector: All Subsectors; Obligations Concerned: Market Access for Financial Institutions (Article 12.5); Description: Chile reserves the right to adopt or maintain any measure with respect to Article 12.5 (Market Access for Financial Institutions), except for the following sectors, subsectors and financial services defined in accordance with the relevant Chilean legislation, subject to the terms, limitations and conditions specified below: Clearing houses for futures contracts and options on securities must be established in Chile as corporations for that sole purpose and with an authorisation from the SVS. They may only be constituted by stock exchanges and their stockbrokers; Clearing houses of futures and options on cattle and agricultural commodities must be established as corporations for that sole purpose and with an authorisation from the SVS.
6	Australia - China				Yes	20- Dec-15					

RTA	RTA Name	ng Coverage into					Commi	Comments on MA, NT, AC			
No			ap	g pr ich	Coverage	into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth	
		Australia	N	X			None (1),(2),(3)	None (1),(2),(3)		GATS plus	
		China	P	X			None (2)	None (1),(2),(3)		GATS	
7	Australia - New Zealand				Yes	01-Jan- 89					
		Australia	N	X			None (1),(2),(3)	None (1),(2),(3)		GATS plus	
		New Zealand	N	X			None (1),(2),(3)	None (1),(2),(3)		GATS plus	
8	Brunei Darussalam - Japan				Yes	31-Jul- 08					
		Brunei	P	X			No commitm	ents on clearing s	ervices	GATS	
		Japan	P	U			None (2),(3)	None (1),(2),(3)		GATS plus	
9	Canada - Chile				No	05-Jul- 97	Pursuant to Art. G-(Agreement does not services for neither border supply, respe	cover trade in fir	nancial		
10	Canada - Colombia				Yes	15- Aug-11					
		Canada	N	X	_		None (2),(3)	None (2),(3)		GATS	

RTA	RTA Name	Parties	Li	sti	FS	Entry	(Commitments		Commi	Comments on MA, NT, AC
No			ng appr oach		Coverage into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth		
		Colombia	N	X			None (2),(3)	None (2),(3)		GATS plus	
11	Canada - Honduras				Yes	01- Oct-14					
		Canada	N	X			None (2),(3)	None (2),(3)		GATS	
		Honduras	N	Х			None (2)	None (2),(3)		GATS extra	
12	Canada - Panama				Yes	01- Apr-13					
		Canada	N	X			None (2),(3)	None (2),(3)		GATS	
		Panama	N	Х			None (2),(3)	None (2),(3)		GATS extra	
13	Canada - Peru				Yes	01- Aug-09					
		Canada	N	X			None (2),(3)	None (2),(3)		GATS	
		Peru	N	Х			None (2),(3)	None (2),(3)		GATS extra	
14	Canada - Rep. of Korea				Yes	01-Jan- 15					
		Canada	N	X			None (2),(3)	None (2),(3)		GATS	

RTA	RTA Name	Parties	Li	sti	FS	Entry	Co	ommitments		Commi	Comments on MA, NT, AC
No			_	g pr ch	Coverage	into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth	
		Korea	N	X			None (2)	None (2),(3)		GATS extra	Annex III: Section A: MA: (3) Financial Services; Sub-Sector: Banking and other financial services (excluding insurance); Obligations Concerned: Market Access for Financial Institutions (Article 10.4); Level of Government: National; Measures: Financial Investment Services and Capital Markets Act (Law No. 11758, 5 April 2013), Articles 298, 323-2, 323-3, 323-10 and 378 Description: Only the Korea Securities Depository and the Korea Exchange may perform clearing and settlement of securities and derivatives listed or traded on the Korea Exchange. Only central counterparties licensed under the Financial Investment Services and Capital Markets Act may perform clearing and settlement of financial investment services including securities and derivatives.
15	Chile - China				No	01- Aug-10	Pursuant to Art. 2 (a Aggreement on Trac services are not cove Trade Agreeement b	de in Services, fin	ancial of the Free		

RTA	RTA Name	Parties	Listi	FS	Entry				Commi	Comments on MA, NT, AC
No			ng appr oach	Coverage	into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth	
16	Chile - Colombia			No	08- May- 09	Pursuant to Art. 9.1 Agreement does not neither investment n respectively.	cover financial s	services for		
17	Chile - Costa Rica (Chile - Central America)			No	15- Feb-02	Pursuant to Art. 11.0 financial services are the Free Trade Agre	e not covered by			
18	Chile - El Salvador (Chile - Central America)			No	01-Jun- 02	Pursuant to Art. 11.0 financial services are the Free Trade Agre	e not covered by			
19	Chile - Guatemala (Chile - Central America)			No	23- Mar-10	Pursuant to Art. 11.0 financial services are the Free Trade Agre	e not covered by			
20	Chile - Honduras (Chile - Central America)			No	19-Jul- 08	Pursuant to Art. 11.0 financial services and the Free Trade Agre	e not covered by			
21	Chile - Japan			Yes	03- Sep-07					

RTA	RTA Name	Parties	Li	isti	FS	Coverage into		ommitments		Commi	Comments on MA, NT, AC
No			ap	g pr ich	Coverage	into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth	
		Chile	P	X				None (3)		GATS extra	MA: (3) Clearing houses for futures contracts and options on securities must be constituted in Chile as corporations for that sole purpose and with an authorization from the SVS.They may only be constituted by stock exchanges and their stockbrokers.
		Japan	P	X			None (2),(3)	None (2),(3)		GATS	
22	Chile - Mexico				No	01- Aug-99	Pursuant to Art. 9-0 Agreement does not neither investment r respectively.	t cover financial s	services for		
23	Chile - Nicaragua (Chile - Central America)				No	19- Oct-12	Pursuant to Art. 11.4 financial services ar the Free Trade Agre	re not covered by	· ·		
24	Chile - Thailand				Yes	05- Nov-15					

RTA	RTA Name	Parties	Li	sti	FS	Entry	Co	ommitments		Commi	Comments on MA, NT, AC
No			ap	g pr ch	Coverage	into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth	
		Chile	P	X				None (3)		GATS extra	MA: (3) Clearing houses for futures contracts and options on securities must be constituted in Chile as corporations for that sole purpose and with an authorisation from the SVS. They may only be constituted by stock exchanges and their stockbrokers.
		Thailand	P	X			No commitme	ents on clearing s	ervices	GATS	
25	China - Costa Rica				No	01- Aug-11	Pursuant to Art. 91 (3) (e) the Agreement does not cover financial services.				
26	China - Hong Kong, China				Yes	29-Jun- 03	This Closer Economic Partnership although regulates financial services is not comprehensive and its trade disciplines are not fully-developped. When it comes to MA it is absent from the Agreement text and it is not implicitly existent in neiter commercial presence (only NT & MFN) nor cross-border supply which is 3 lines about further liberalization discussions. Therefore, I discard it				
27	China - Korea, Republic of				Yes	20- Dec-15					
		China	P	X			None (2)	None (1),(2),(3)		GATS	
	_	Korea	P	X			No commitments on clearing services		GATS		

RTA	RTA Name	Parties	Li	isti	FS	Entry					Comments on MA, NT, AC
No			ap	opr och	Coverage	into force	Mode (1) MA				
28	China - Macao, China				Yes	17- Oct-03	This Closer Econom regulates financial s and its trade discipli When it comes to M Agreement text and neiter commercial p cross-border supply liberalization discuss	ines are not fully- IA it is absent fro it is not implicitly resence (only NT which is 3 lines a	mprehensive developped. om the y existent in '& MFN) nor about furhter		
29	China - New Zealand				Yes	01- Oct-08					
		China	P	X			None (2)	None (1),(2),(3)		GATS	
		New Zealand	P	U			None (2),(3) None (2),(3)			GATS	
30	China - Singapore				Yes	01-Jan- 09					
		China	P	X			None (2)	None (1),(2),(3)		GATS	

RTA	RTA Name	Parties	Lis	sti	FS	rage into			Commi	Comments on MA, NT, AC	
No			ap oa	pr	Coverage	into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth	
31	Colombia - Mexico	Singapore	P	X	Yes	01-Jan- 95	The Parties according submit their reservath happened last time Interefore, it is discarding the submit their reservations.	tions to FS sector	s. Has not	GATS	MA: (1) Unbound, except for the provision of settlement and clearing services for financial assets which are listed on overseas exchanges only. (3) These measures are also limitations on national treatment. Settlement and clearing services for exchange traded securities and financial futures can only be provided by Central Depository (Pte) Limited and SGX-DT respectively. Only one clearing house established under the Banking Act may provide clearing services for Singapore dollar cheques and interbank fund transfer.
32	Colombia - Northern Triangle (El Salvador, Guatemala, Honduras)				No	12- Nov-09	Pursuant to Art. 12 Agreement does not neither investment r respectively.	t cover financial s	ervices for		
33	Costa Rica - Colombia				Yes	01- Aug-16					

RTA	RTA Name	Parties	Li	isti	FS	Entry				Commi	Comments on MA, NT, AC
No			ap	ng Cove		into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth	
		Costa Rica	N	X			None (2)	None (2),(3)		GATS extra	
		Colombia	N	X			None (2),(3)	None (2),(3)		GATS plus	
34	Costa Rica - Peru				No	01-Jun- 13	Pursuant to Art. 12. Agreement does not neither investment r respectively.	cover financial s	ervices for		
35	Costa Rica - Singapore				No	01-Jul- 13	Pursuant to Art. 11 does not cover finar investment nor cross	icial services for	neither		
36	Dominican Republic - Central America - United States Free Trade Agreement (CAFTA-DR)				Yes	01- Mar-06					
		Costa Rica	N	Х			None (2)	None (2),(3)		GATS extra	

RTA	RTA Name	Parties	Li	sti	FS	Entry	C	ommitments		Commi	Comments on MA, NT, AC
No			ap	g pr ch	Coverage	into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth	
		Dominican Republic	N	X			None (2)	None (2),(3)		GATS extra	Annex III: Section A: MA: (3) Sector: Financial Services, Subsector: Securities; Obligations Concerned: Market Access (Article 12.4); Measures: Ley de Mercado de Valores, No. 19-00, May 8, 2000, Arts. 46, 57, 62, 71, 76, 103, and 108; Description: The following entities must be incorporated under the laws of the Dominican Republic: (a) stock exchanges, (b) commodities exchanges, (c)brokers, (d) dealers, (e) clearing houses, (f) centralized depositories of securities, (g) investment fund managers, and (h) securities underwriters.
		El Salvador	N	X			None (2)	None (2),(3)		GATS extra	
		Guatemala	N	X			None (2)	None (2),(3)		GATS extra	

RTA	RTA Name	Parties	Li	isti	FS	Entry	C	ommitments		Commi	Comments on MA, NT, AC
No			ap	g pr ich	Coverage	into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth	
		Honduras	N	X			None (2)	None (2),(3)		GATS extra	Annex III: Section A: MA: (3) Sector: Financial Services Subsector: Centralized Depositories for the Custody, Compensation and Liquidation of Shares; Obligations Concerned: Market Access (Article 12.4); Level of Government: Central; Measures: Decree No. 8-2001, Ley de Mercado de Valores, Art. 139; Description: Depositories for the custody, compensation and liquidation of shares in Honduras must be constituted as public corporations.
		Nicaragua	N	Х			None (2)	None (2),(3)		GATS extra	
		United States	N	X			None (2),(3)	None (2),(3)		GATS minus	
37	EFTA - Central America (Costa Rica and Panama)				Yes	19- Aug-14					
		Costa Rica	P	X			None (2)	None (2)		GATS extra	

RTA	RTA Name	Parties	Li	isti	FS	Entry	C	ommitments		Commi	Comments on MA, NT, AC
No			ap	g pr ich	Coverage	into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth	
		Panama	P	X			None (1),(2),(3)	None (1),(2),(3)		GATS extra	
		Iceland	P	U			None (2),(3)	None (2)		GATS	
		Lichtenstein	P	U			None (1),(2),(3)			GATS	
		Norway	P	U			None (2),(3)	None (1),(2),(3)		GATS plus	
		Switzerland	P	U			None (1),(2),(3)	None (2)		GATS	
38	EFTA - Chile				No	01- Dec-04	Pursuant to Art. 45 commitments have in relation to trade i	been undertaken 1	by the Parties		
39	EFTA - Colombia				Yes	01-Jul- 11					
		Colombia	P	X			None (2),(3)			GATS	
		Iceland	P	U			None (2),(3)	None (2)		GATS	
		Lichtenstein	P	U			None (1),(2),(3)			GATS	
		Norway	P	U			None (2),(3)	None (1),(2),(3)		GATS plus	
		Switzerland	P	U			None (1),(2),(3)	None (2)		GATS	

RTA	RTA Name	Parties	Li	isti	FS	Entry	C	Commitments		Commi	Comments on MA, NT, AC
No			ap	ng opr och	Coverage	into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth	
40	EFTA-Georgia				Yes	01- Sep-17					
		Georgia	P	X			None (1),(2),(3)	None (1),(2),(3)		GATS	
		Iceland	P	U			None (2),(3)	None (2)		GATS	
		Lichtenstein	P	U			None (1),(2),(3)			GATS	
		Norway	P	U			None (2),(3)	None (1),(2),(3)		GATS plus	
		Switzerland	P	U			None (1),(2),(3)	None (2)		GATS	
41	EFTA - Hong Kong, China				Yes	01- Oct-12					
		Hong Kong	N	X			No commitm	nents on clearing s	services	GATS	
		Iceland	N	X			None (1),(2),(3)	None (1),(2),(3)		GATS plus	
		Lichtenstein	N	X			None (1),(2),(3)	None (1),(2),(3)		GATS plus	
		Norway	N	X			None (3)	None (3)		GATS minus	
		Switzerland	N	X			None (1),(2),(3)	None (1),(2),(3)		GATS plus	

RTA	RTA Name	Parties	Li	isti	FS	Entry	(Commitments		Commi	Comments on MA, NT, AC
No			ap	ng opr och	Coverage	into force	Mode (1) MA	Mode (2) NT	Mode (3)	tments' depth	
42	EFTA - Korea, Republic of				Yes	01- Sep-06					
		Korea	P	X			No commitm	nents on clearing s	services	GATS	
		Iceland	P	U			None (2),(3)	None (2)		GATS	
		Lichtenstein	P	U			None (1),(2),(3)			GATS	
		Norway	P	U			None (2),(3)	None (1),(2),(3)		GATS plus	
		Switzerland	P	U			None (1),(2),(3)	None (2)		GATS	
43	EFTA - Mexico				Yes	01-Jul- 01					
		Mexico	N	X			None (1),(2),(3)	None (1),(2),(3)		GATS extra	
		Iceland	N	U			None (2),(3)	None (2)		GATS	
		Lichtenstein	N	U			None (1),(2),(3)			GATS	
		Norway	N	U			None (2),(3)	None (1),(2)		GATS	
		Switzerland	N	U			None (1),(2),(3)	None (2)		GATS	
44	EFTA - Singapore				Yes	01-Jan- 03					

RTA	RTA Name	Parties	Li	isti	FS	Entry	C	ommitments		Commi	Comments on MA, NT, AC
No			ap	ng opr och	Coverage into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth		
		Singapore	P	X			None (2)	None (2)		GATS	MA: (1) Unbound, except for the provision of settlement and clearing services for financial assets which are listed on overseas exchanges only. (3) Settlement and clearing services for exchange traded securities and financial futures can only be provided by Singapore Exchange Ltd (or its subsidiaries). Settlement and clearing services for Singapore dollar cheques and interbank funds transfer can only be provided by operators appointed by the Singapore Clearing House Association.
		Iceland	P	U			None (2),(3)	None (2)		GATS	
		Lichtenstein	P	U			None (1),(2),(3)			GATS	
		Norway	P	U			None (2),(3)	None (1),(2)		GATS	
		Switzerland	P	U			None (1),(2),(3)	None (2)		GATS	
45	EFTA-Ukraine				Yes	01-Jun- 12					
		Ukraine	P	Х			None (1),(2),(3)	None (1),(2),(3)		GATS	
		Iceland	P	U			None (2),(3)	None (2)		GATS	

RTA	RTA Name	Parties	Li	isti	FS	Entry	C	ommitments		Commi	Comments on MA, NT, AC
No			ap	ig opr ich	Coverage	into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth	
		Lichtenstein	P	U			None (1),(2),(3)			GATS	
		Norway	P	U			None (1),(2)	None (1),(2),(3)		GATS plus	
		Switzerland	P	U			None (1),(2),(3)	None (2)		GATS	
46	El Salvador- Honduras - Chinese Taipei				No	01- Mar-08	Pursuant to Art. 10.0 Agreement does not neither investment r respectively.	cover financial s	services for		
47	EU - Albania				Yes	01- Apr-09	Financial services and Stabilization and Assextent that progressing Parties shall occur in treatment is only export of trade in services. NT commitments, a absence of Schedule	sociation Agreer ve liberalization in the coming yea plicitly extended There are no conduct that is reaffirm	between the rs. MFN for mode (3) crete MA and med by the		
48	EU - Bosnia Herzegovina				Yes	01-Jun- 15	Financial services and Stabilization and Assextent that progressing Parties shall occur in treatment is only export trade in services. NT commitments, a absence of Schedule	sociation Agreer ve liberalization in the coming yea plicitly extended There are no con and that is reaffirm	between the rs. MFN for mode (3) crete MA and ned by the		

RTA	RTA Name	Parties	Li	isti	FS	Entry	C	Commitments		Commi	Comments on MA, NT, AC
No			ap	g opr ich	Coverage	into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth	
49	EU - Canada				Yes	21- Sep-17					
		Canada	N	X			None (2),(3)	None (2),(3)		GATS	
		EU (-2)	N	X			None (2),(3)	None (2),(3)		GATS	
		EE & LT	N	X			None (1),(2),(3)	None (1),(2),(3)		GATS	
50	EU - CARIFORUM				Yes	01- Nov-08					
		EU (-2)	N	X			None (2),(3)	None (2),(3)		GATS	MA/NT: (1) RO: Unbound for financial leasing, for trading of money market instruments, foreign exchange, derivative products, exchange rate and interest rate instruments, transferable securities and other negotiable instruments and financial assets, for participation in issues of all kinds of securities, for asset management and for settlement and clearing services for financial assets. Payments and money transmission services are allowed only through a resident bank
		EE & LT	N	X			None (1,),(2),(3)	None (1),(2),(3)		GATS	
		CARIFORUM	P	X			No commitm	nents on clearing s	ervices	GATS	

RTA	RTA Name	Parties	Li	sti	FS	Entry	C	ommitments		Commi	Comments on MA, NT, AC
No			ap oa	pr	Coverage	into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth	
51	EU - Central America				Yes	01- Aug-13					
		Costa Rica	N	X			None (2),(3)	None (2),(3)		GATS extra	
		El Salvador	N	X			None (3)	None (3)		GATS extra	
		Honduras	N	X			None (2),(3)	None (2),(3)		GATS extra	
		Guatemala	N	X			None (3)	None (3)		GATS extra	
		Nicaragua	N	X			None (3)	None (3)		GATS extra	
		Panama	N	X			None (1),(2),(3)	None (1),(2),(3)		GATS extra	

RTA	RTA Name	Parties	Li	isti	FS	Entry	C	ommitments		Commi	Comments on MA, NT, AC
No			ap	g pr ich	Coverage	into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth	
		EU (-2)	N	X			None (2),(3)	None (2),(3)		GATS	MA/NT: (1) RO: Unbound for financial leasing, for trading of money market instruments, foreign exchange, derivative products, exchange rate and interest rate instruments, transferable securities and other negotiable instruments and financial assets, for participation in issues of all kinds of securities, for asset management and for settlement and clearing services for financial assets. Payments and money transmission services are allowed only through a resident bank
		EE & LT	N	X			None (1),(2),(3)	None (1),(2),(3)		GATS	
52	EU - Chile				Yes	28- Oct-05					
		Chile	P	X				None (3)		GATS extra	MA: (3) Clearing houses for futures contracts and options on securities must be constituted in Chile as corporations for that sole purpose and with an authorisation from the SVS. They may only be constituted by stock exchanges and their stockbrokers.

RTA	RTA Name	Parties	Li	isti	FS	Entry	C	ommitments		Commi	Comments on MA, NT, AC
No			ap	g pr ich	Coverage	into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth	
		EU	P	U			None (2),(3)	None (2),(3)		GATS	MA: (3) IT: Clearing services including the phase of final settlement may be conducted only by entities duly authorised and supervised by the Bank of Italy in agreement with Consob.
53	EU - Colombia and Peru				Yes	01- Mar-13					
		Colombia	N	X			None (2),(3)	None (2),(3)		GATS plus	
		Peru	N	X			None (3)	None (3)		GATS extra	
		EU (-2)	N	X			None (2),(3)	None (2),(3)		GATS	MA: (1) RO: Unbound for financial leasing, for trading of money market instruments, foreign exchange, derivative products, exchange rate and interest rate instruments, transferable securities and other negotiable instruments and financial assets, for participation in issues of all kinds of securities, for asset management and for settlement and clearing services for financial assets. Payments and money transmission services are allowed only through a resident bank.

RTA	RTA Name	Parties	Li	isti	FS	Entry	Commitments			Commi	Comments on MA, NT, AC
No			ap	g pr ich	Coverage	into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth	
		EE & LT	N	X			None (1),(2),(3)	None (1),(2),(3)		GATS	
54	EU - Colombia, Peru - Accession of Equador				Yes	01-Jan- 17					
		Equador	P	X			None (3)	None (3)		GATS extra	
		EU (-3)	N	X			None (2),(3)	None (2),(3)		GATS	MA: (1) RO: Unbound for financial leasing, for trading of money market instruments, foreign exchange, derivative products, exchange rate and interest rate instruments, transferable securities and other negotiable instruments and financial assets, for participation in issues of all kinds of securities, for asset management and for settlement and clearing services for financial assets. Payments and money transmission services are allowed only through a resident bank.
		EE & LT	N	X			None (1),(2),(3)	None (1),(2),(3)		GATS	

RTA	RTA Name	Parties	Li	sti	FS	Entry	C	ommitments		Commi	Comments on MA, NT, AC
No			ap	g pr ch	Coverage into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth		
		HR	N	X			None (2)	None (2)		GATS	MA: (3) HR: None, except for settlement and clearing services where the Central Depositary Agency (CDA) is the sole supplier in Croatia. Access to the services of the CDA will be granted to non-residents on a non-discriminatory basis.
55	EU - Georgia				Yes	01- Sep-14					
		EU (-2)	Н	X			None (2)	None (2),(3)		GATS minus	MA: (3) RO: Unbound for financial leasing, for trading of money market instruments, foreign exchange, derivative products, exchange rate and interest rate instruments, transferable securities and other negotiable instruments and financial assets, for participation in issues of all kinds of securities, for asset management and for settlement and clearing services for financial assets. Payments and money transmission services are allowed only through a resident bank
		EE & LT	Н	X			None (1),(2)	None (1),(2),(3)		GATS minus	
		Georgia	Н	X			None (1),(2)	None (1),(2),(3)		GATS minus	

RTA	RTA Name	Parties		isti	FS	Entry	C	ommitments		Commi	Comments on MA, NT, AC
No			ap	opr och	Coverage	force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth	
56	EU - Korea, Republic of				Yes	01-Jul- 11					
		EU (-2)	P	X			None (2),(3)	None (2),(3)		GATS	MA: (1) RO: Unbound for financial leasing, for trading of money market instruments, foreign exchange, derivative products, exchange rate and interest rate instruments, transferable securities and other negotiable instruments and financial assets, for participation in issues of all kinds of securities, for asset management and for settlement and clearing services for financial assets. Payments and money transmission services are allowed only through a resident bank
		EE & LT	P	X			None (1),(2),(3)	None (1),(2),(3)		GATS	
		Korea	P	X			No commitm	ents on clearing s	ervices	GATS	
57	EU - Mexico				Yes	01- Oct-00					

RTA	RTA Name	Parties	Li	sti	FS	Entry	C	ommitments		Commi	Comments on MA, NT, AC
No			ap	g pr ch	Coverage	into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth	
		EU	N	U			None (2),(3)	None (2),(3)		GATS	MA: (3) Italy: Clearing and settlement of securities may be conducted only by the official clearing system. A company authorised by the Bank of Italy in agreement with Consob could be entrusted with the activity of clearing, up to the final settlement of securities.
		Mexico	N	X			None (1,),(2),(3)	None (1),(2),(3)		GATS extra	
58	EU - Moldova, Republic of				Yes	01- Sep-14					
		EU (-2)	Н	X			None (2)	None (2),(3)		GATS minus	MA: RO: Unbound for financial leasing, for trading of money market instruments, foreign exchange, derivative products, exchange rate and interest rate instruments, transferable securities and other negotiable instruments and financial assets, for participation in issues of all kinds of securities, for asset management and for settlement and clearing services for financial assets. Payments and money transmission services are allowed only through a resident bank.
		EE & LT	Н	X			None (1),(2)	None (1),(2),(3)		GATS minus	

RTA	RTA Name	Parties	Li	isti	FS	Entry	C	ommitments		Commi	Comments on MA, NT, AC
No			ap	g pr ich	Coverage	into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth	
		Moldova	Н	X			None (1),(2)	None (1),(2),(3)		GATS minus	
59	EU - Montenegro				Yes	01- May- 10	Financial services and Stabilization and Assextent that progressing Parties shall occur in treatment is only export trade in services. NT commitments, a absence of Schedule	ive liberalization on the coming year plicitly extended. There are no conduct that is reaffirm.	nent to the between the ss. MFN for mode (3) crete MA and hed by the		
60	EU - Serbia				Yes	01- Sep-13	Financial services at Stabilization and As extent that progressi Parties shall occur in treatment is only ex- of trade in services. NT commitments, a absence of Schedule	ive liberalization on the coming year plicitly extended. There are no conduct that is reaffirm	nent to the between the s. MFN for mode (3) crete MA and hed by the		
61	EU - FYROM				Yes	01- Apr-04	Financial services at Stabilization and As extent that progressi Parties shall occur in treatment is only ex of trade in services. NT commitments, a absence of Schedule	ive liberalization on the coming year plicitly extended. There are no control of that is reaffirm	nent to the between the ss. MFN for mode (3) crete MA and hed by the		

RTA	RTA Name	Parties	Li	sti	FS	Entry	C	ommitments		Commi	Comments on MA, NT, AC
No			_	g pr ch	Coverage	into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth	
62	EU - Ukraine				Yes	23- Apr-14					
		EU (-2)	Н	X			None (2)	None (2),(3)		GATS minus	MA: RO: Unbound for financial leasing, for trading of money market instruments, foreign exchange, derivative products, exchange rate and interest rate instruments, transferable securities and other negotiable instruments and financial assets, for participation in issues of all kinds of securities, for asset management and for settlement and clearing services for financial assets. Payments and money transmission services are allowed only through a resident bank. HR: None, except for settlement and clearing services where the Central Depositary Agency (CDA) is the sole supplier in Croatia. Access to the services of the CDA will be granted to non-residents on a non-discriminatory basis.
		EE & LT	Н	X			None (1),(2)	None (1),(2),(3)		GATS minus	
		Ukraine	Н	X			None (1),(2)	None (1),(2),(3)		GATS minus	

RTA	RTA Name	Parties	Li	sti	FS	Entry	C	ommitments		Commi	Comments on MA, NT, AC
No			_	g pr ch	Coverage	into force	Mode (1) MA	Mode (2) NT	Mode (3)	tments' depth	
63	Guatemala - Chinese Taipei				No	01-Jul- 06	Pursuant to Art. 10.0 Agreement does not neither investment r respectively.	t cover financial s	services for		
64	Gulf Cooperation Council (GCC) - Singapore				Yes	01- Sep-13					
		United Arab Emirates	P	X			No commitm	ents on clearing s	services	GATS	
		Kingdom of Bahrain	P	X			None (2)	None (2)		GATS plus	MA: (1) BH: Unbound, except for cross- listed equities that may be cleared on exchanges offering reciprocal privileges and that meet Bahrain information requirements. (3) BH: Unbound. Bahraini Dinar (BD) clearing must be through the Central Bank of Bahrain (CBB). BSE listed equities & securities must be cleared through the BSE.
		Kingdom of Saudi Arabia	P	X			No commitm	ents on clearing s	services	GATS	MA: (2), (3) Unbound for all domestic settlement and clearing services provided exclusively by Saudi Arabian Monetary Agency (SAMA) under 'j.' This also limits national treatment.

RTA	RTA Name	Parties	Li	isti	FS	Entry	C	ommitments		Commi	Comments on MA, NT, AC
No			ap	ig opr ich	Coverage	into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth	
		Sultanate of Oman	P	X			None (2),(3)	None (2),(3)		GATS	
		State of Kuwait	P	X			None (2)	None (2)		GATS	
		State of Quatar	P	X			None (1),(2),(3)	None (1),(2),(3)		GATS	
		Singapore	P	X			None (2)	None (2)		GATS	MA: (1) Unbound, except for the provision of settlement and clearing services for financial assets which are listed on overseas exchanges only. (3) Settlement and clearing services for exchange traded securities and financial futures can only be provided by Central Depository (Pte) Limited and SGX-DT respectively. Only one clearing house established under the Banking Act (Cap. 19) may provide clearing services for Singapore dollar cheques and interbank fund transfer.
65	Hong Kong, China - Chile				Yes	09- Oct-14					

RTA	RTA Name	Parties	Li	isti	FS	Entry	C	ommitments		Commi	Comments on MA, NT, AC
No			ap	g pr ich	Coverage	into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth	
		Chile	P	X				None (3)		GATS extra	MA: (3) Clearing houses for futures contracts and options on securities must be constituted in Chile as corporations for that sole purpose and with an authorisation from the SVS. They may only be constituted by stock exchanges and their stockbrokers.
		Hong Kong	P	X			No commitm	ents on clearing s	services	GATS	
66	Hong Kong, China - Macao, China				Yes	27- Oct-17					
		Hong Kong	P	X			No commitm	ents on clearing s	services	GATS	
		Macao	P	X			None (2),(3)	None (1),(2),(3)		GATS	
67	Hong Kong, China - New Zealand				Yes	01-Jan- 11					
		Hong Kong	N	X			No commitm	nents on clearing s	services	GATS	
		New Zealand	N	X			None (2),(3)	None (2),(3)		GATS	
68	Iceland-China				Yes	01-Jul- 14					
		Iceland	P	U			None (2),(3)	None (2)		GATS	

RTA	RTA Name	Parties	Li	isti	FS	Entry	Co	ommitments		Commi	Comments on MA, NT, AC
No				g pr ich	Coverage	into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth	
		China	P	X			None (2)	None (1),(2),(3)		GATS	
69	India - Japan				Yes	01- Aug-11					
		India	P	X			No commitments on clearing services		GATS		
		Japan	P	U			None (2),(3)	None (1),(2),(3)		GATS plus	
70	India - Malaysia				Yes	01-Jul- 11					
		India	P	X			No commitme	ents on clearing s	services	GATS	
		Malaysia	P	X			No commitments on clearing services		GATS		
71	India - Singapore				Yes	01- Aug-05					
		India	P	X			No commitme	ents on clearing s	services	GATS	

RTA	RTA Name	Parties	Li	isti	FS	Entry	(Commitments		Commi	Comments on MA, NT, AC
No			ap	g pr ich	Coverage	into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth	
		Singapore	P	X			None (2)	None (2)		GATS	MA: (1) Unbound, except for the provision of settlement and clearing services for financial assets which are listed on overseas exchanges only.(3) Settlement and clearing services for exchange traded securities and financial futures and inter-bank transfers can only be provided by Central Depository (Pte) Limited, Singapore Exchange Derivatives Clearing Ltd, and Banking Computer Services Pte Ltd respectively. Only the clearing house established under the Banking Act may provide clearing services for Singapore dollar cheques and services for interbank fund transfers.
72	Japan - Australia				Yes	15-Jan- 15					
		Japan	N	Х			None (1),(2),(3)	None (1),(2),(3)		GATS plus	
		Australia	N	X			None (1),(2),(3)	None (1),(2),(3)		GATS plus	
73	Japan - Indonesia				Yes	01-Jul- 08					
		Japan	P	U			None (2),(3)	None (1),(2),(3)		GATS plus	

RTA	RTA Name	Parties	Li	isti	FS	Entry	C	ommitments		Commi	Comments on MA, NT, AC
No			ар	ig opr ich	Coverage	into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth	
		Indonesia	P	X						GATS	
74	Japan - Malaysia				Yes	13-Jul- 06					
		Japan	P	U			None (2),(3)	None (1),(2),(3)		GATS plus	
		Malaysia	P	X			No commitm	ents on clearing s	ervices	GATS	
75	Japan-Mexico				Yes	01- Apr-05		Pursuant to Article 108 of the EPA, the GATS commitments are applicable			
		Japan	N	X			None (2),(3)	None (1),(2)		GATS	
		Mexico	N	X			No commitm	ents on clearing s	ervices	GATS	
76	Japan - Mongolia				Yes	07-Jun- 16					
		Japan	P	U			None (2),(3)	None (1),(2),(3)		GATS	
		Mongolia	P	X			No commitm	ents on clearing s	ervices	GATS	
77	Japan - Peru				Yes	01- Mar-12					
		Japan	N	X			None (1),(2),(3)	None (1),(2),(3)		GATS plus	
		Peru	N	Х			None (2),(3)	None (2),(3)		GATS extra	

RTA	RTA Name	Parties	Li	sti	FS	Entry	C	ommitments		Commi	Comments on MA, NT, AC
No			ap	g pr ch	Coverage	into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth	
78	Japan - Philippines				Yes	11- Dec-08					
		Japan	P	U			None (2),(3)	None (1),(2),(3)		GATS plus	
		Philippines	P	X			No commitm	ents on clearing s	ervices	GATS	
79	Japan - Singapore				Yes	30- Nov-02					
		Japan	P	U			None (2),(3)	None (1),(2)		GATS	
		Singapore	P	X			None (2)	None (2)		GATS	MA: (1) Unbound, except for the provision of settlement and clearing services for financial assets which are listed on overseas exchanges only. (3) Settlement and clearing services for exchange traded securities and financial futures can only be provided by the SGX or its subsidiaries. Settlement and clearing services for Singapore dollar cheques and interbank funds transfers can only be provided by operators appointed by the Singapore Clearing House Association.
80	Japan - Switzerland				Yes	01- Sep-09					
		Japan	N	X			None (1),(2),(3)	None (1),(2),(3)		GATS plus	

RTA	RTA Name	Parties	Li	sti	FS	Entry	C	ommitments		Commi	Comments on MA, NT, AC
No			ap	g pr ch	Coverage	into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth	
		Switzerland	N	X			None (1),(2),(3)	None (1),(2),(3)		GATS plus	
81	Japan - Thailand				Yes	01- Nov-07					
		Japan	P	U			None (2),(3)	None (1),(2),(3)		GATS plus	
		Thailand	P	X			No commitm	ents on clearing s	ervices	GATS	
82	Japan - Viet Nam				Yes	01- Oct-09					
		Japan	P	U			None (2),(3)	None (1),(2),(3)		GATS plus	
		Viet Nam	P	X			None (2),(3)	None (2),(3)		GATS	
83	Jordan - Singapore				Yes	22- Aug-05					
		Jordan	P	X			None (2)	None (2)		GATS	MA: (3) Access restricted to the Depository Center at the Amman Bourse for securities, and to the Central Bank of Jordan for all other financial instruments.

RTA	RTA Name	Parties	Li	sti	FS	Entry	Co	ommitments		Commi	Comments on MA, NT, AC
No			n ap oa	pr		into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth	
		Singapore	P	X			None (2)	None (2)		GATS	MA: (1) Unbound, except for the provision of settlement and clearing services for financial assets which are listed on overseas exchanges only. (3) Settlement and clearing services for exchange traded securities and financial futures can only be provided by Central Depository (Pte) Limited and Singapore Exchange Derivatives Clearing Ltd respectively. Only one clearing house established under the Banking Act may provide clearing services for Singapore dollar cheques and interbank fund transfer.
84	Korea, Republic of - Colombia				No	15-Jul- 16	Pursuant to Art. 8.1 Agreement does not services for neither border supply, respe	cover trade in fin investment purpo	nancial		
85	Korea, Republic of - Australia				Yes	12- Dec-14					

RTA	RTA Name	Parties	Li	sti	FS	Entry	C	ommitments		Commi	Comments on MA, NT, AC
No			ap	g pr ch	Coverage	into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth	
		Korea	N	X			None (2)	None (2),(3)		GATS extra	Annex III: Sector: Financial Services; Sub-Sector: Banking and other financial services (excluding insurance) Obligations Concerned: Market Access for Financial Institutions (Article 8.4); Level of Government: Central Measures: Financial Investment Services and Capital Markets Act (Law No. 9407, February 3, 2009), Articles 298, 378 and 166 Enforcement Decree of the Financial Investment Services and Capital Markets Act (Presidential Decree No. 21291, February 3, 2009), Article 178; Description: Only the Korea Securities Depository and the Korea Exchange may perform liquidation and settlement of securities and derivatives listed or traded on the Korea Exchange.
		Australia	N	X			None (2),(3)	None (2),(3)		GATS plus	
86	Korea, Republic of - Chile				No	01- Apr-04	Pursuant to Art. 10. Agreement does no services for neither border supply, response	t cover trade in fin investment purpo	nancial		

RTA	RTA Name	Parties					Commi	Comments on MA, NT, AC			
No			ap	appr oach		into force	Mode (1) MA			tments' depth	
87	Korea, Republic of - India				Yes	01-Jan- 10					
		Korea	P	X			No commitm	ents on clearing s	services	GATS	
		India	P	X			No commitments on clearing services			GATS	
88	Korea, Republic of - New Zealand				No	20- Dec-15	Pursuant to Art. 10 Agreement does not services for neither border supply, respe	cover trade in fi	nancial		
89	Korea, Republic of - Singapore				Yes	02- Mar-06					
		Korea	P	X			No commitments on clearing services			GATS	

RTA No	RTA Name	Parties	n ap	Listi FS ng Coverage appr oach		Entry into force	Mode (1) MA	Mode (2)	Mode (3) AC	Commi tments' depth	Comments on MA, NT, AC
		Singapore	P	X			None (2)	None (2)		GATS	MA: (1) Unbound, except for the provision of settlement and clearing services for financial assets which are listed on overseas exchanges only. (3) Settlement and clearing services for exchange traded securities and financial futures can only be provided by Central Depository (Pte) Limited and Singapore Exchange Derivatives Clearing Ltd respectively. Only one clearing house established under the Banking Act may provide clearing services for Singapore dollar cheques and interbank fund transfer.
90	Korea, Republic of - US				Yes	15- Mar-12					

RTA	RTA Name	Parties	Li	sti	FS	Entry	C	ommitments		Commi	Comments on MA, NT, AC
No			ap	g pr ch	· ·	into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth	
		Korea	N	X			None (2)	None (2),(3)		GATS extra	Annex III: Sector: Financial Services Sub-Sector: Banking and other financial services (excluding insurance) Obligations Concerned: Market Access for Financial Institutions (Article 13.4); Level of Government: Central Measures: Articles 173-3 and 194 of the Securities and Exchange Act (Law No. 7762, December 29, 2005) Article 84-27 of the Enforcement Decree of the Securities and Exchange Act (Presidential Decree No. 19806, December 29, 2006); Description: Only the Korea Securities Depository and the Korea Exchange may perform liquidation and settlement of securities and derivatives listed or traded on the Korea Exchange.
		US	N	X			None (2),(3)	None (2),(3)		GATS minus	
91	Korea, Republic of - Viet Nam				Yes	20- Dec-15					
		Korea	P	X				ents on clearing s	ervices	GATS	
		Viet Nam	P	X			None (2),(3)	None (2),(3)		GATS	

RTA	RTA Name	Parties	Li	isti	FS	Entry	C	ommitments		Commi	Comments on MA, NT, AC
No			ap	g pr ich	Coverage	into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth	
92	Malaysia - Australia				Yes	01-Jan- 13					
		Malaysia	P	X			No commitm	ents on clearing s	services	GATS	
		Australia	P	U			None (2),(3)	None (2),(3)		GATS	
93	Mexico - Central America				No	01- Sep-12	Pursuant to Art. 11.2 (3) (a) and 12.2 (2) (b) the Agreement does not cover trade in financial services for neither investment purposes nor cross- border supply, respectively.				
94	Mexico - Panama				Yes	01-Jul- 15					
		Mexico	N	X			None (2),(3)	None (2),(3)		GATS extra	
		Panama	N	X			None (2),(3)	None (2),(3)		GATS extra	
95	Mexico - Uruguay				No	15-Jul- 04	Pursuant to Art. 13-02 (4) and 10-02 (2) (a) the Agreement does not cover trade in financial services for neither investment purposes nor cross-border supply, respectively.				
96	New Zealand - Chinese Taipei				Yes	01- Dec-13					
		New Zealand	N	X			None (2),(3)	None (2),(3)		GATS	

RTA	RTA Name	Parties	Li	isti	FS	Entry	C	ommitments		Commi	Comments on MA, NT, AC
No			ар	ng opr och	Coverage	into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth	
0.7	May Zadand	Chinese Taipei	N	X		01	None (1),(2),(3)	None (1),(2),(3)		GATS plus	Section I: Sector: Financial Services, Sub-Sector: Industry Classification: Securities & Futures; Obligations Concerned: Local Presence (Chapter 13 (Cross-Border Trade in Services) Article 7). Measures: Securities and Exchange Act, January 4 2012 Futures Trading Act, June 9 2010 Securities Investment Trust and Consulting Act, June 9 2010 Standards Governing the Establishment of Securities Firms, June 16 2009 Standards Governing the Establishment of Futures Commission Merchants, October 2 2007 Description: Cross-Border Trade in Services Cross-border financial services suppliers shall not supply any financial services related to securities and futures, including solicitation or marketing thereof, to any entities or persons located in the Separate Customs Territory of Taiwan, Penghu, Kinmen and Matsu without prior approval and obtaining related business licenses from the competent authorities.
97	New Zealand - Malaysia					01- Aug-10					
		New Zealand	P	U			None (2),(3)	None (2),(3)		GATS	

RTA	RTA Name	Parties	Li	isti	FS	Entry	(Commitments		Commi	Comments on MA, NT, AC
No		Malaysia	ар	ng opr och	Coverage	into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth	
		Malaysia	P	X			No commitn	nents on clearing s	ervices	GATS	
98	New Zealand - Singapore				Yes	01-Jan- 01					
		New Zealand	P	X			None (2),(3)	None (2),(3)		GATS	
		Singapore	P	X			None (2)	None (2)		GATS	MA: (1) Unbound, except for the provision of settlement and clearing services for financial assets which are listed on overseas exchanges only. (3) Settlement and clearing services for exchange traded securities and financial futures, and Singapore dollar cheques and interbank funds transfer can only be provided by SGX or its subsidiaries and Banking Computer Services Pte Ltd.
99	Nicaragua - Chinese Taipei				Yes	01-Jan- 08					
		Nicaragua	N	X			None (2)	None (2),(3)		GATS extra	
		Chinese Taipei	N	X			None (2),(3)	None (2),(3)		GATS	
100	North American Free Trade Agreement (NAFTA)				Yes	01-Jan- 94					

RTA	RTA Name	Parties	Li	isti	FS	Entry	C	ommitments		Commi	Comments on MA, NT, AC
No			ap	opr och	Coverage	into force	Mode (1) MA	Mode (2) NT	Mode (3)	tments' depth	
		Canada	N	X			None (2),(3)	None (2),(3)		GATS	
		Mexico	N	Х			None (1),(2),(3)	None (1),(2),(3)		GATS extra	
		US 2 Canada	N	X			None (2),(3)	None (2),(3)		GATS minus	
		US 2 Mexico	N	X			None (1),(2),(3)	None (1),(2),(3)		GATS plus	
101	Pacific - Alliance				Yes	01- May- 16					

RTA	RTA Name	Parties	Li	isti	FS	Entry	C	ommitments		Commi	Comments on MA, NT, AC
No			ap	g pr ich	Coverage	into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth	
		Chile	N	X			None (2),(3)	None (2),(3)		GATS extra	7. Sector: Servicios Financieros; Subsector: Servicios bancarios y demás servicios financieros; Obligaciones Afectadas: Derecho de Establecimiento (Artículo 11.5); Nivel de Gobierno: Central Medidas: Ley N° 20345, Diario Oficial de 6 de junio de 2009, Ley sobre Sistemas de Compensación y Liquidación de Instrumentos Financieros, artículo 21 Ley N° 18.046, Diario Oficial de 22 de octubre de 1981, Ley de Sociedades Anónimas, Título XIII, artículos 126 a 132. Descripción: Sólo los agentes de valores, corredores de bolsas de valores, corredores de bolsas de productos, bancos y demás personas que autorice la Superintendencia de Valores y Seguros a través de normas de carácter general podrán ser miembros de sistemas de compensación y liquidación de instrumentos financieros.
		Colombia	N	X			None (2),(3)	None (2),(3)		GATS plus	
		Mexico	N	X			None (2),(3)	None (2),(3)		GATS extra	

RTA	RTA Name	Parties	Li	sti	FS	Entry	to		Commi	Comments on MA, NT, AC	
No			ap	ng Covera		into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth	
		Peru	N	X			None (2),(3)	None (2),(3)		GATS extra	
102	Pakistan - China				Yes	10- Oct-09					
		Pakistan	P	X			No commitm	No commitments on clearing services		GATS	
		China	P	X			None (2)	None (1),(2),(3)		GATS	
103	Pakistan - Malaysia				Yes	01-Jan- 08					
		Pakistan	P	X			No commitm	ents on clearing s	ervices	GATS	
		Malaysia	P	X			No commitm	ents on clearing s	ervices	GATS	
104	Panama - Chile				No	07- Mar-08	Pursuant to Art. 10. not cover financial s		ement does		
105	Panama - Chinese Taipei				Yes	01-Jan- 04					
		Panama	N	Х			None (1),(2),(3)	None (1),(2),(3)		GATS extra	
		Chinese Taipei	N	X			None (2),(3)	None (2),(3)		GATS	

RTA	RTA Name	Parties	Li	sti	FS	Entry	C	ommitments		Commi	Comments on MA, NT, AC
No			ap oa	pr	Coverage	into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth	
106	Panama - Costa Rica (Panama - Central America)				Yes	23- Oct-08					
		Panama	N	Х			None (2),(3)	None (2),(3)		GATS extra	
		Costa Rica	N	Х			None (2),(3)	None (2),(3)		GATS extra	
107	Panama - El Salvador (Panama - Central America)				Yes	11- Apr-03					
		Panama	N	Х			None (1),(2),(3)	None (1),(2),(3)		GATS extra	
		El Salvador	N	Х			None (1),(2),(3)	None (1),(2),(3)		GATS extra	
108	Panama - Guatemala (Panama - Central America)				Yes	20-Jun- 09					

RTA	RTA Name	Parties	Li	sti	FS	Entry	Co	ommitments		Commi	Comments on MA, NT, AC
No			ap oa	pr	Coverage into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth		
		Panama	N	X			None (1),(2),(3)	None (1),(2),(3)		GATS extra	
		Guatemala	N	Х			None (2)	None (2)		GATS extra	
109	Panama - Honduras (Panama - Central America)				Yes	09-Jan- 09					
		Panama	N	X			None (1),(2),(3)	None (1),(2),(3)		GATS extra	
		Honduras	N	X			None (1),(2),(3)	None (1),(2),(3)		GATS extra	
110	Panama - Nicaragua (Panama - Central America)				Yes	21- Nov-09					
		Panama	N	Х			None (1),(2),(3)	None (1),(2),(3)		GATS extra	
		Nicaragua	N	X			None (1),(2),(3)	None (1),(2),(3)		GATS extra	

RTA	RTA Name	Parties	Li	sti	FS	Entry	C	ommitments		Commi	Comments on MA, NT, AC
No			ap	ng Coverage appr oach		into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth	
111	Panama-Peru				Yes	01- May- 12					
		Panama	N	X			None (2),(3)	None (2),(3)		GATS extra	
		Peru	N	X			None (2),(3)	None (2),(3)		GATS plus	
112	Panama - Singapore					24-Jul- 06					
		Panama	N	X			None (2),(3)	None (2),(3)		GATS extra	

	Singapore	N	X		None (2)	None (2)	GATS	Annex III: Section A (Non-Conforming
	8F				(2)	(=)		Measures): Sector: Financial Services,
								Sub-Sector All sectors; Industry
								Classification; Type of Reservation:
								Market Access for Financial Institutions,
								National Treatment; Measure Companies
								Act, Cap. 50, Part IV Division
								7A,Securities and Futures Act, Cap. 289,
								Part III, Banking Act, Cap. 19, section 59;
								Description of Reservation: Clearing and
								settlement services for exchange-traded
								securities and financial futures and inter-
								bank transfers can only be provided by
								Central Depository (Pte) Limited,
								Singapore Exchange Derivatives Clearing
								Ltd and Banking Computer Services Pte
								Ltd respectively Section B (Future
								Measures): Sector Financial Services;
								Sub-Sector Settlement and clearing
								services for financial assets, including
								securities, derivative products and other
								negotiable instruments; Industry
								Classification, CPC 81329 Other services
								related to securities market; Type of
								Reservation: Market Access for Financial
								Institutions, National Treatment;
								Description
								of Reservation: Singapore reserves the
								right to adopt or maintain any measure
								affecting the supply of clearing and
								settlement services for exchange traded
								securities and financial futures and

RTA	RTA Name	Parties	Li	isti	FS	Entry	C	ommitments		Commi	Comments on MA, NT, AC
No			ap	ng Coverag appr oach		into force	Mode (1) Mode (2) Mode (3)	tments' depth			
											Singapore dollar cheques and interbank transfers. Existing Measures: Companies Act, Cap. 50, Securities and Futures Act 2001, Cap. 289
113	Peru - Chile				No	01- Mar-09	Pursuant to Art. 11.1 (4) (a) and 12.1 (3) (a) the Agreement does not cover trade in financial services for neither investment purposes nor cross- border supply, respectively.				
114	Peru - China				Yes	01- Mar-10					
		Peru	P	X			None (2),(3)	None (2),(3)		GATS plus	
		China	P	X			None (2)	None (1),(2),(3)		GATS	
115	Peru - Korea, Republic of				Yes	01- Aug-11					
		Peru	N	X			None (2),(3)	None (2),(3)		GATS plus	
		Korea	N	X			None (2),(3)	None (2),(3)		GATS extra	
116	Peru - Mexico				Yes	01- Feb-12					

RTA	RTA Name	Parties	L	isti	FS	Entry	C	ommitments		Commi	Comments on MA, NT, AC
No			ap	ng Covera appr oach		into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth	
		Peru	N	X			None (2),(3)	None (2),(3)		GATS extra	
		Mexico	N	X			None (2),(3)	None (2),(3)		GATS extra	
117	Peru - Singapore				No	01- Aug-09	Pursuant to Art. 10. Agreement does not services for neither border supply, respectively obligations are inco	t cover trade in fin investment purpo ectively. However	nancial ses nor cross-		
		Peru	P	X			None (3)	None (3)		GATS	
		Singapore	P	X			None (2)	None (2)		GATS	
118	Singapore - Australia				Yes	28-Jul- 03					

	a:		~.		27 (2)	27 (2) (2)	G + TTG	
	Singapore	N	X		None (2)	None (2),(3)	GATS	Annex Vi: Section B: Sector: Financial
							plus	Services, Sub-Sector: Settlement and
								clearing services for financial assets,
								including securities, derivative products
								and other negotiable instruments;
								Obligations Concerned: Market Access
								for Financial Institutions; Level of
								Government: National; Measure:
								Companies Act, Cap. 50. Securities and
								Futures Act, Cap. 289; Reservation:
								Singapore reserves the right to adopt or
								maintain any measure affecting the supply
								of clearing and settlement services for
								exchange traded securities, financial
								futures and interbank transfers. Sector:
								Financial Services; Obligations
								Concerned: National Treatment, Market
								Access for Financial Institutions; Level of
								Government: National; Reservation:
								Singapore reserves the right to adopt or
								maintain any measure in the form of
								subsidies or grants provided by Singapore
								in connection with the supply of any
								financial service involving what
								Singapore deems as systemically
								important financial markets
								infrastructure, including: (a) Exchanges;
								(b) Central Depositories; (c) Repositories;
								(d) Clearing and Settlement facilities; and
								(e) Market operators.
								•
	Australia	N	X		None (2),(3)	None (2),(3)	GATS	

RTA	RTA Name	Parties	Li	isti	FS	Entry	C	ommitments		Commi	Comments on MA, NT, AC
No			ap	g pr ich	Coverage	into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth	
										plus	
119	Singapore - Chinese Taipei				No	22- Apr-14	Pursuant to Art. 9.3 Agreement does not services for neither border supply, respe commitments are in	t cover trade in fin investment purpo ectively. However	nancial ses nor cross-		
		Singapore	P	X			None (2)	None (2)		GATS	
		Chinese Taipei	P	X			None (2),(3)	None (2),(3)		GATS	
120	Switzerland - China				Yes	01-Jul- 14					
		Switzerland	P	U			None (1),(2),(3)	None (2)		GATS	
		China	P	X			None (2)	None (1),(2),(3)		GATS	
121	Thailand - Australia				Yes	01-Jan- 05					
		Thailand	Н	X			No commitm	No commitments on clearing services			
		Australia	Н	X			None (2),(3)	None (2),(3)		GATS plus	
122	Thailand - New Zealand				No	01-Jul- 05	Pursuant to Article 8.1 trade in services is not captured by the scope of the current Agreement. Services trade is regulated by ASEAN - Australia - NZ.				

RTA	RTA Name	Parties	Li	isti	FS	Entry	C	ommitments		Commi	Comments on MA, NT, AC
No			ap	ig opr ich	Coverage	into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth	
123	Trans-Pacific Strategic Economic Partnership				No	28- May- 06		Pursuant to 12.3 (2) (a) the Agreement does not cover trade in financial services.			
124	Ukraine - Montenegro				Yes	01-Jan- 13					
		Ukraine	P	X			None (1),(2),(3)	None (1),(2),(3)		GATS	
		Montenegro	P	X			None (2)	None (1),(2),(3)		GATS	MA: (3) This type of services may be provided by Central Depository of Securities only
125	US - Australia				Yes	01-Jan- 05					
		US	N	Х			None (2),(3)	None (2),(3)		GATS minus	
		Australia	N	Х			None (2),(3)	None (2),(3)		GATS plus	
126	US - Bahrain				Yes	01- Aug-06					
		US	N	X			None (2),(3)	None (2),(3)		GATS minus	
		Bahrain	N	X			None (2),(3)	None (2),(3)		GATS plus	

RTA No	RTA Name	Parties	Li n ap	pr	FS Coverage	Entry into force	Commitments Mode (1) Mode (2) Mode (3) MA NT AC			Commi tments' depth	Comments on MA, NT, AC
127	US - Chile		Ua		Yes	01-Jan- 04					
		US	N	X			None (2),(3)	None (2),(3)		GATS minus	

	Chile	N	X		None (2)	None (2),(3)	GATS	Annex III: Section A: MA: (3) Sector:
	Cilile	IN	Λ		None (2)	140116 (2),(3)		
							extra	Financial Services; Subsector: Banking
								and Other Financial Services; Obligations
								Concerned: Right of Establishment
								Measures: Ley N° 18.045, Official
								Gazette of October 22, 1981, Ley de
								Mercado de Valores, Title XIX, Article
								155. Ley N° 18.046, Official Gazette of
								October 22, 1981, Ley de Sociedades
								Anónimas, Title XIII, Articles 126 to 132;
								Description: Clearing houses of futures,
								options and other contracts of similar
								nature that the Superintendencia de
								Valores y Seguros may authorize, must be
								established as special purpose
								corporations (sociedades anónimas
								especiales) under Chilean law. Only stock
								exchanges established in Chile and stock
								brokers who are members of those
								exchanges can be shareholders of clearing
								houses. Sector: Financial Services;
								Subsector: Banking and Other Financial
								Services Obligations Concerned: Right of
								Establishment Measures: Ley N° 19.220,
								Official Gazette of May 31, 1993, Ley de
								Bolsa de Productos Agropecuarios, Title
								IV, Articles 24, 25 and 26. Ley N° 18.046,
								Official Gazette of October 22, 1981, Ley
								de Sociedades Anónimas, Title XIII,
								Articles 126 to 132. Description: Clearing
								houses of futures and options on cattle and
								agricultural commodities must be

RTA	RTA Name	Parties	Li	isti	FS	Entry	C	Commitments		Commi	Comments on MA, NT, AC
No			ng appr oach		Coverage	into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth	
											established as special purpose corporations (sociedades anónimas especiales) under Chilean law.
128	US - Colombia				Yes	15- May- 12					
		US	N	X			None (2),(3)	None (2),(3)		GATS minus	
		Colombia	N	X			None (2),(3)	None (2),(3)		GATS plus	
129	US - Jordan				Yes	17- Dec-01					
		US	P	U			None (2),(3)	None (2),(3)		GATS minus	
		Jordan	P	X			None (2)	None (2)		GATS	MA: (3) Access restricted to the Depository Center at the Amman Bourse for securities, and to the Central Bank of Jordan for all other financial instruments.
130	US - Morocco				Yes	01-Jan- 06					
		US	N	X			None (2),(3)	None (2),(3)		GATS minus	

RTA	RTA Name	Parties	Li	isti	FS	Entry	(Commitments		Commi	Comments on MA, NT, AC
No			ap	ng opr och	Coverage	into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth	
		Morocco	N	X			None (2),(3)	None (2),(3)		GATS extra	
131	US - Oman				Yes	01-Jan- 09					
		US	N	X			None (2),(3)	None (2),(3)		GATS minus	
		Oman	N	X			None (2),(3)	None (2),(3)		GATS	
132	US - Panama				Yes	31- Oct-12					
		US	N	X			None (2),(3)	None (2),(3)		GATS minus	
		Panama	N	X			None (2),(3)	None (2),(3)		GATS extra	
133	US - Peru				Yes	01- Feb-09					
		US	N	Х			None (2),(3)	None (2),(3)		GATS minus	
		Peru	N	X			None (2),(3)	None (2),(3)		GATS plus	
134	US-Singapore				Yes	01-Jan- 04					

RTA	RTA Name	Parties	Li	isti	FS	Entry	C	ommitments		Commi	Comments on MA, NT, AC
No			ap	ng opr och	Coverage	into force	Mode (1) MA	Mode (2) NT	Mode (3) AC	tments' depth	
		US	N	X			None (2),(3)	None (2),(3)		GATS minus	
		Singapore	N	X			None (2)	None (2)		GATS	Annex 10B: Section B: Type of Reservation: Market Access for Financial Institutions and National Treatment; Level of Government: National; Measures: Companies Act, Cap. 50, Part IV Division 7A Securities and Futures Act, Cap. 289, Part III Banking Act, Cap. 19, Section 59; Description: Clearing and settlement services for exchange-traded securities and financial futures and interbank transfers can only be provided by Central Depository (Pte) Limited, Singapore Exchange Derivatives Clearing Ltd, and Banking Computer Services Pte Ltd respectively
135	China - Georgia					01-Jan- 18					
		China	P	X			None (2)	None (1),(2),(3)		GATS	
		Georgia	P	X			None (1),(2),(3)	None (1),(2),(3)		GATS	
136	EAEU - Viet Nam					05- Oct-16					

RTA	RTA Name	Parties		sti	FS	Entry	C	ommitments		Commi tments' depth	Comments on MA, NT, AC
No			ap oa	pr	Coverage	into force	Mode (1) MA	Mode (2) NT	Mode (3) AC		
		Viet Nam	Н	X			None (2),(3)	None (2),(3)		GATS	
		Russian Federation	Н	Х			None (2)	None (2)		GATS	