Introduction

Governing the World's Biggest Market: The Politics of Derivatives Regulation After the 2008 Crisis

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This book examines the politics of derivatives regulation after the 2008 global financial crisis. At the time of the crisis, derivatives had come to occupy a central position in the global economy. By the end of 2008, the notional value of outstanding out-the-counter (OTC) derivatives contracts totaled $684 trillion, a staggeringly large figure that was approximately ten times the global GDP.[2] Taken together, derivatives had in fact grown to be the world's largest market. This market involved participants from across the globe ranging from large banks and pension funds to farmers and manufacturers, from governments and municipalities to international financial institutions and sovereign wealth funds.

The 2008 financial crisis revealed very starkly that derivatives mattered not just to these groups participating in this huge market. The trading of these financial products - which include forwards, futures, options or swaps - was also enormously significant to everyone else in the world. Before the crisis, star investor Warren

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[2] OTC figures from Bank for International Settlements, 2010:6. OTC derivatives represented about 90% of all global derivatives at the time.

Buffett had warned in 2002 that derivatives were “financial weapons of mass destruction, carrying dangers that, while now latent, are potentially lethal”.[3] This warning proved prescient when derivatives contributed in significant ways to the severity of the 2008 meltdown.

In the wake of the crisis, policymakers in the G20 countries committed to reform the regulation of derivatives markets. The regulation of derivatives was a topic that had previously not attracted much sustained public attention, despite the extremely rapid growth of the markets since the early 1980s. A few corporate scandals (e.g. Enron, Orange County) and episodes of financial instability involving derivatives (e.g. Long-Term Capital Management) in the 1990s had briefly brought derivatives on the agenda of regulators and scholars, but these episodes proved to be short-lived and failed to alter significantly the regulation of these markets.[4] The situation changed with the financial crisis of 2008, as the regulation of derivatives markets now assumed center stage on the international public policy agenda and not just because of concerns about systemic financial instability. Critics argued that inadequate regulation of derivatives also contributed to commodity price volatility, sovereign and corporate debt problems, market abuse, and, more generally, the growing and unchecked influence of private financial interests. In short, derivatives markets were suddenly at the middle of core political debates about the distribution of power and wealth in the modern world economy.

What have been the precise goals of the G20 reform agenda? What have been the results of efforts to implement this agenda to date? More generally, what does this episode teach us about the politics of derivatives regulation after the global financial crisis? Despite the global importance of derivatives markets, these questions have not received much attention to date from those interested in the politics of the global economy. Even among those who specialize in the study of the politics of

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[3] Buffett 2002:15
[4] Tsingou 2006

global financial regulation, other topics such as banking rules receive much more attention than the governance of derivatives. For many scholars and students of global political economy, derivatives markets remain mysterious and complex.

This volume is designed to begin to rectify this relative neglect. The first chapter by Irene Spagna after this introductory one provides some background for readers with less knowledge of derivatives by describing and analyzing the dramatic growth of pre-crisis derivatives and their contribution to the 2008 crisis. The rest of the chapters then address the questions above by analyzing various aspects of the politics of post-2008 derivatives regulation. Some of these chapters focus on the dynamics of international regulatory coordination between leading powers, while others examine reforms in specific geographical contexts or with respect to specific issue areas. Despite these different foci, some common themes emerge in addressing the three core questions. The purpose of this introductory chapter is to summarize these themes.

What have been the goals of the G20 regulatory agenda?

The first theme concerns the content of the G20-led reform objectives themselves. As Irene Spagna explains in chapter 1, policymakers in the US and other leading financial powers such as the UK had allowed derivatives to grow largely unchecked in the years leading up to the crisis, particularly OTC derivatives that are traded bilaterally and privately away from organized exchanges. They had done this not just through various liberalizing and permissive rules but also through their support for self-regulatory initiatives of market actors and private industry bodies such as the International Swaps and Derivatives Association (ISDA). The 2008 crisis ushered in an important change in official attitudes whose dimensions this volume explores.

The shift in attitudes was already apparent when the G20 leaders met for the first time in November 2008 to endorse a new international agenda for financial regulatory reform. In their final statement, the G20 leaders called for "a review of the scope of financial regulation, with a special emphasis on institutions, instruments, and markets that are currently unregulated" and OTC derivatives were specifically identified as a priority area.[5] By the time of their third summit in September 2009 in Pittsburgh, the G20 leaders had settled on a new comprehensive set of regulatory goals for derivatives markets that they each agreed to implement.[6]

To begin with, the G20 leaders committed to force all standardized OTC derivatives contracts to be cleared by central counterparties (CCPs) by the end of 2012. CCPs are designed to act as an intermediary between sellers and buyers of derivatives, guaranteeing trades should either party default, and forcing both parties to post margin or collateral to cover potential losses. Officials argued that CCPs would reduce systemic risks by minimizing uncertainty in the markets and by enabling counterparty risks to be managed centrally and to be better supervised and regulated. CCPs were already used in some segments of the industry and the G20 leaders now committed to extend this practice for all standardized derivatives contracts on a mandatory basis.

The G20 leaders also declared that derivative contracts not centrally cleared should be subject to higher capital requirements, a move that both incentivized central clearing and mitigated the risks associated with non-standardized contracts that continued to be cleared bilaterally. In addition, they decided in 2011 to create common global standards for initial and variation margins for non-centrally cleared contracts in order to ensure that collateral was available to cushion the impact of defaults and to help address "de-stabilizing pro-cyclicality" that resulted from the

[5] G20 2008.
[6] G20 2009.

tendency of market actors to lower margins in boom times and raise them in crises.[7] These standards were then announced in 2013.[8]

Equally important, they committed to ensure that CCPs be subject to effective regulation and supervision – a particularly important aim given that derivatives-related counterparty risks would now become increasingly concentrated in CCPs. International financial standard setting bodies subsequently developed standards for CCPs that addressed issues such as prudential requirements, market access rules, measures to protect customer positions and assets, governance arrangements, information disclosure, as well as resolution and recovery.[9]

Another goal outlined by the G20 leaders in September 2009 was that, by the end of 2012, "all standardised OTC derivative contracts should be traded on exchanges or electronic trading platforms, where appropriate".[10] By bringing bilateral OTC trades on to these organized trading platforms, policymakers sought to make them more transparent not just to regulators but also to other market participants. Greater transparency would help reduce the asymmetric control of information by the dealer banks that dominated these markets through their unique knowledge of trading prices and volumes. The markets would, it was hoped, thus become less prone to what the G20 called "market abuse" and would function more smoothly, particularly in times of stress.[11]

Another major objective outlined by the G20 leaders in September 2009 was that all OTC contracts – both cleared and non-cleared – should be reported to "trade repositories" (TRs). TRs serve as centralized registries collecting and maintaining records about who has traded what and with whom. One TR had already emerged before the crisis to reduce confirmation backlogs for credit default swaps (CDS), a

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[7] BCBS & IOSCO 2012: 2; see also G20 2011.
[8] BCBS & IOSCO 2013.
[9] CPSS & IOSCO 2012, IOSCO & CPMI 2014.
[10] G20 2009.
[11] Quote from G20 2009: 9. See also Financial Stability Board 2010:10.

product whose purchasers pay a fee every quarter to the seller in return for a promise that the full value of an underlying bond will be repaid in the event of a default. Because CDS ended up at the center of the 2008 crisis (for reasons explained in the next chapter), this TR was able to help calm fears during the Lehman crisis by publicizing how the size of net CDS exposure was smaller than many expected at the time. By forcing all OTC derivatives contracts to be reported to TRs, the G20 leaders hoped to give market actors greater information, and regulators and supervisors a more complete picture of risk exposures across all markets.[12] International regulatory bodies subsequently also developed standards for TRs that cover similar issues as those for CCPs and seek to ensure that regulatory authorities gain access to TR data and that global aggregation mechanisms are established.[13]

Alongside those various goals, the G20 leaders also announced one final objective in late 2011 that applied more specifically to commodity derivatives markets. During financial crisis of 2008, commodity prices spiked dramatically in ways that contributed further to the global economic instability at the time. As Eric Helleiner details in his chapter, this experience and another set of price spikes in 2010-11 generated much concern about whether growing speculative trading in commodity derivatives markets was contributing to commodity price volatility. Responding to this concern, the G20 leaders declared in late 2011 that regulators of commodity derivatives markets "should have, and use formal position management powers, including the power to set ex-ante position limits"[14] Many countries already had in place "position management powers" – such as position limits that set ceilings on the number of contracts each trader could hold in specific markets – but this statement signaled a new international endorsement and encouragement of their use.

Taken together, these core goals outlined by the G20 leaders (and summarized in Figure 1) were heralded as an historic departure from the pre-crisis

[12] Helleiner 2014b.
[13] CPSS and IOSCO 2012, 2013.
[14] G20 2011.

regulatory paradigm. They did indeed signal a new willingness to strengthen public regulation and supervision of global derivatives markets. At the same time, this volume argues that it is important not to overstate the degree of change from pre-crisis norms that is embodied in the G20 reform agenda.

Figure 1: Core Aspects of the G20 Agenda for Derivatives Regulatory Reform

Issue	**Requirements**
Central clearing	• All standardized OTC derivatives should be cleared via CCPs • Non-cleared contracts subject to margin requirements and higher capital requirements • CCPs subject to effective regulation and supervision, including recovery and resolution plans
Trading	• All standardized OTC derivatives should be traded on exchanges or electronic trading platforms
Reporting	• All OTC derivatives controls should be reported to TRs • All TRs should meet international standards
Position limits	• Regulators of commodity derivatives markets should have, and use formal position management powers, including the power to set ex-ante position limits

The limits of change

One reason to be cautious is that the G20 leaders continued to assign profit-seeking private actors a prominent place in the governance of derivative markets. Many of the institutions placed at the center of the reforms – CCPs, exchanges, and trade repositories – were of this kind. In the important case of CCPs, the Bank of England initially warned against this strategy, arguing that a non-profit, user-owned governance structure would be optimal because these institutions were now being set up to play a key role in restraining risky behavior in the market. But this idea gained little political traction.[15] Instead, the G20 leaders put profit-seeking CCPs at the center of the reform agenda, many of which - as Erin Lockwood's chapter in this volume shows - replicate key practices and techniques of risk-management that had failed in the OTC markets before the crisis.[16] The dangers of poor risk management at CCPs were only compounded by the fact that the content of the G20 reform agenda had the effect of encouraging an intense competitive struggle among various private sector groups trying to capture the new mandatory clearing business.

G20 policymakers also delegated key aspects of the post-crisis rule-making and implementation process to the same private groups that orchestrated self-regulation before the crisis. For example, public authorities worked closely with ISDA and the leading dealer banks ("the G14" and more recently the "G16") in order to encourage greater transparency, central clearing, and contract standardization.[17] ISDA also played the lead role in areas such as the design of contractual models for CDS eligible for CCP clearing, and the solicitation and adjudication of private sector proposals for the introduction of new TRs for commodity, interest rate and equity derivatives.[18] In addition, as the chapter by Matthew Gravelle and Stefano Pagliari notes, ISDA has been at the center of industry-led initiatives designed to assist the

[15] Bank of England 2010: 10
[16] See also Lockwood (2015) for the enduring role of banks' value-at-risk models as an "authoritative practice" with "productive power" in the context of broader post-2008 regulatory reforms.
[17] Financial Stability Board 2011; Biggins and Scott 2012.
[18] Saguato 2013; CPSS & IOSCO 2012: 6.

implementation of the G20 agenda by promoting mutual recognition of domestic regulatory frameworks.

In instances such as these, ISDA's role has shifted to complementing, rather than substituting for or preempting, public regulatory initiatives, but its central place within the governance of these markets persists.[19] Indeed, some ISDA initiatives have even given it a more prominent role. For example, John Biggins and Colin Scott have made this case in the context of their 2013 analysis of ISDA's creation of a set of new 15-member ISDA Determinations Committees (composed of 10 CDS dealers and 5 non-dealers). These Committees define the "credit events" that will trigger payment in a credit default swaps and their decisions can be extremely important because the Committee's decisions are legally binding under ISDA contracts. In March 2012, for example, the decision about whether a Greek quasi-voluntary debt restructuring deal was to be considered a "credit event" impacted the evolution of debt crisis in the Eurozone.[20]

More generally, the G20 leaders have also refused to endorse many reforms that would have aimed more squarely at constraining the size and speculative features of the markets. For example, while the G20 endorsed position limits in commodity derivatives markets, they refrained from backing this kind of constraint on speculative trading vis-a-vis other asset classes that are vastly larger in size and volume. They also ignored calls for bans on derivatives products that were particularly associated with destabilizing speculative trading such as "unattached" (or "naked") CDS contracts in which the purchaser does not hold the underlying bond to which the contact is linked. In the words of New York insurance superintendent Eric Dinallo, these products were the equivalent of "taking out insurance on your neighbor's house and maybe hoping it blows up".[21] Yet the G20 backed no efforts to ban, or even license, these products. Only in the more limited European regional context did

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[19] McKeen-Edwards and Porter 2013: 57-8.
[20] Biggins and Scott 2013.
[21] Quoted in Helleiner 2011: 138.

authorities – provoked by speculation against Greek sovereign debt in 2010 – undertake a limited initiative to regulate unattached CDS on European sovereign bonds.[22]

Similarly, at the height of the crisis, many actors called for *all* OTC contracts to be centrally cleared and traded on exchanges, a move that would have significantly curtailed the size, complexity, and speculative features of these markets. But the G20 limited requirements for central clearing and exchange trading to "standardized" contracts, leaving out more complex 'bespoke' transactions. With this provision, officials estimate that as much as one-quarter of interest rate swaps, one-third of CDS and two-thirds of other OTC derivatives will remain uncleared.[23]

Summing up, while the G20 leaders endorsed strengthened public regulation and supervision of the markets, their overall reform agenda did not seek to turn back the clock by radically reducing the size and importance of global derivatives markets or by reimposing the kind of tight public controls over financial markets that existed in many countries in the early postwar years. Instead of trying to constrain market growth and speculative activity in significant ways, the main goal was a more modest one of enhancing the transparency and resiliency of the markets. This more "market-friendly" objective was reinforced by the fact that the G20 continued to rely on profit-seeking private actors and private rule-making to play important roles in the governance of the markets, as had been done in the pre-crisis period. As Duncan Wigan has suggested, post-crisis regulatory initiatives appear much more as efforts to "improve the operations of the system" than ones designed to challenge it.[24]

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[22] Pagliari 2013b. The idea of licensing derivatives had been raised by the BIS (2009) which suggested that all new financial products be registered and evaluated on an ongoing basis by a consumer financial products regulator because of their respective potential to contribute to systemic risk. A precedent for banning derivatives products on public policy grounds in the US came from Congress' rejection of a Pentagon proposal for the introduction of terrorism futures in 2003 (as a market-based predictor of likelihood od terrorist attacks) (Omarova 2013: p. 104 fn30).

[23] BCBS & IOSCO 2012: 2 fn4.

[24] Wigan 2010: 122. See also Wigan 2009.

What have been the results of efforts to implement the G20 agenda to date?

The forging of the G20 reform agenda was just the first phase in the process of regulatory change in the global derivatives sector after the crisis. Equally important have been the subsequent efforts to implement that agenda. Many of the chapters in this volume analyze the politics of the implementation phase. Taken together, they reveal how implementation has been associated with a number of unanticipated outcomes.

Delays and inconsistencies

The first of these has been the slow nature of implementation. The institution at the center of coordinating the implementation has been the Financial Stability Board (FSB), a body created in 2009 by the G20 with membership that includes all G20 countries and a few others.[25] Its regular updates have highlighted the failure of its members to meet deadlines initially set by the G20 leaders. The G20 leaders set a very clear deadline at their September 2009 summit that "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."[26] In April 2013, however, the FSB acknowledged that "no jurisdiction had fully implemented requirements by end-2012" and only "less than half of the FSB member jurisdictions currently have legislative and regulatory frameworks in place to implement the G20 commitments".[27] Since then, more countries have taken steps towards implementing the G20 agenda, but in 2016 the FSB continued to lament that progress in the implementation of OTC derivatives reforms "remains uneven".[28]

Delays have even characterized the domestic reforms in the two major

[25] For an overview, see Helleiner 2014c: ch.5.
[26] G20 2009.
[27] Financial Stability Board 2013: 1.
[28] Financial Stability Board 2016a: 1.

jurisdictions – the US and the European Union - at the center of driving international regulatory agenda.[29] The G20 reform agenda was significantly influenced by regulatory goals outlined by Obama administration in May 2009. The United States was also the first major jurisdiction to develop comprehensive legislation strengthening derivatives regulation with the passage of the Dodd-Frank Wall Street Reform and Consumer Protection Act in July 2010. As a number of the chapters in this volume describe, however, since the passage of the Dodd-Frank Act, the details of its implementation have been unexpectedly delayed and continue to be rolled out slowly by the two domestic regulators allocated strengthened authority to oversee and regulate derivatives: the CFTC and the SEC. The election in November 2016 of President Donald Trump and his pledge to roll-back many aspects of the Dodd-Frank Act have further called into question the prospects for the implementation of these commitments.

In Europe, the European Commission presented its first Communication outlining possible derivatives regulatory reforms in July 2009, shortly after the Obama administration announced its goals in May. Following approval by the European Parliament and the major European member countries, the European Market Infrastructure Regulation ("EMIR") came into force in August 2012 as a new EU-wide regulatory framework for OTC derivatives that followed many of the G20 goals. Other relevant initiatives of the European Commission have included: a revision of its Capital Requirements Directive in order to introduce differentiated capital charges between CCP cleared and non-CCP cleared contracts, and a revision of its Market Abuse Directive to increase the power of regulatory authorities to investigate market abuses in derivatives markets, and regulations of short-selling that cover the use of credit default swaps. But as some chapters in this volume note, progress has been slow in areas such as the execution of OTC derivatives on electronic platforms, post-trade transparency, and position limits for commodity

[29] Knaack 2015.

derivatives that were included in the revision of the Market in Financial Instruments Directive (MiFID II) (which was adopted by the European Parliament and European Council in 2014 but whose details then had to be developed by the European Securities and Markets Authority).

Other jurisdictions, such as Japan, have also undertaken legislative initiatives to implement G20 commitments, but many others have delayed action. In particular while the regulatory frameworks for central clearing and trade reporting have been implemented in most jurisdictions, the drafting of guidelines related to resolution frameworks for CCPs by international standard-setting bodies has been lagging behind. As a result, the FSB noted in 2016 that a number of CCPs still lacked the adequate safeguards to ensure that they maintained sufficient financial resources and procedures needed to facilitate their resolution in the case of a crisis.[30] The FSB also noted in 2016 that "platform trading frameworks are relatively undeveloped in most jurisdictions"[31], with only "less than half of FSB member jurisdictions" having in place comprehensive criteria to achieve this objective.[32] Along the same lines, the FSB highlighted that only three of 24 member jurisdictions were on track to have variation and initial margin requirements for non-centrally cleared derivatives in force from September 2016 in accordance with the schedule set by IOSCO and BCBS.[33]

Even where implementation was more widespread such as in the area of trade reporting that is analyzed in Peter Knaack's chapter, the FSB highlighted inconsistencies. Although all but five FSB jurisdictions had trade reporting requirements in place covering over 90% of OTC derivatives transactions in their jurisdictions by mid-2016,[34] the FSB noted that different implementation issues continued to influence the effectiveness of trade reporting requirements, including "difficulties with TR data quality, challenges in aggregating data across TRs, and

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[30] Financial Stability Board 2016b: 31.
[31] Financial Stability Board 2016b: 1.
[32] Financial Stability Board 2016b: 35.
[33] Financial Stability Board 2016b: 13.
[34] Financial Stability Board 2016b: 5.

legal barriers to reporting complete data to TRs and to authorities' access to TR-held data".[35]

Differences have also emerged between major jurisdictions at the stage of implementation with respect to issues such as: requirements for mandatory clearing, the scope of the exemptions offered to specific market players and types of derivatives from the clearing and trading requirements, segregation and portability requirements, CCP ownership and governance requirements, definitions of organized trading platforms, and details of position limits.[36] In some cases, differences that existed in primary legislation have been reconciled during the implementation stage, but the latter has also been an occasion to introduce new divergences across jurisdictions. These divergences often reflected changes that dilute in various ways the goals of the initial G20 agenda.

Conflict and Fragmentation

In addition to the delayed and inconsistent nature of implementation across jurisdictions, another unexpected outcome has been the degree of conflict and regulatory fragmentation that has emerged between jurisdictions. The negotiation of the initial G20 reform agenda was a remarkably cooperative process that held out the prospect of the emergence of common global rules governing globally integrated markets. In the end, however, the implementation of the same agenda has been characterized by much disagreement and regulatory fragmentation.

Disagreements have been generated not just by the divergent pace and content of implementation across jurisdictions but also by issues relating to the jurisdictional scope of the rules being introduced – an issue explored in a number of

[35] Financial Stability Board 2016b: 1.
[36] CFTC & SEC, 2012.

the chapters in this volume. For example, the Dodd-Frank Act contains explicit references to the extraterritorial application of many of its rules to foreign entities, which, according to one analyst, “have seldom, if ever, been seen before in U.S. financial regulation”.[37] These provisions have been justified by US authorities on the grounds that American taxpayers were asked to bail out AIG whose troubles stemmed largely from swaps written by its UK subsidiary.[38] But they have generated controversy abroad, particularly in East Asia, as Yu-wai Vic Li’s chapter describes. EMIR also contains extraterritorial provisions regulating trades between non-EU entities when these have a ‘direct, substantial and foreseeable effect’ within the E.U. or when this is necessary to guard against evasion of the rules.[39]

As Gravelle and Pagliari’s chapter explains, both the US and EU included legislative provisions enabling the extra-territorial application of their respective laws to be waived if a foreign jurisdiction introduced domestic laws that were equivalent to their own. But they highlight how the determination of equivalency has generated substantial tension, first and foremost in the US-EU relationship itself. Since 2008, US and European policymakers have devoted considerable time to the task of trying to resolve the potential transatlantic conflicts in this area. As Elliot Posner’s chapter also analyzes, the negotiations between US and European authorities to develop a collaborative framework to defer to each other’s rules have been fraught with difficulties. The FSB has identified the persistence of this disagreement between the United States and European Union as a stumbling bloc negatively affecting the consistent implementation of the G20 agenda in a number of smaller markets.[40]

Jurisdictional issues have also arisen around the implementation of the G20 goals of promoting central clearing. For example, rather than rely on US-based CCPs, European authorities pressured the major derivative dealers in 2009 to clear CDS on

[37] Coffee 2014: 29.
[38] Coffee 2014; Helleiner 2014a; Greene and Potiha 2013.
[39] Coffee 2014.
[40] Financial Stability Board 2011.

European reference entities through a CCPs based in Europe.[41] Location requirements for the clearing of derivatives or jurisdiction-specific authorisation requirements for cross-border access have also been introduced in many jurisdictions outside of the EU, generating new challenges for international cooperation. As the FSB noted in 2014, "few CCPs are currently permitted to operate in more than one or two jurisdictions, which poses challenges to the wider global uptake of central clearing, in particular for participants engaged in cross-border transactions".[42] In 2016, the FSB also expressed the concern that the absence of cross-border availability of CCPs was potentially leading authorities to "delay consideration and adoption of specific central clearing determinations by an authority whose CCP is not yet authorised abroad."[43]

The implementation of other G20 commitments has generated similar fragmentation trends. For example, in implementing the trading requirement, US regulators have required that every trading platform used by US market actors, regardless of its geographical location, should come under US regulatory oversight. As Gravelle and Pagliari's chapter notes, this move has triggered a bifurcation in a number of markets, as European trading platforms have sought to escape the US rules. Similarly, Knaack's chapter describes how, instead of relying on one single TR to collecting information on trades globally for each asset class, a multitude of TRs with more restricted national or regional reach have emerged in a variety of jurisdictions across the world, The chapter shows how the cross-border sharing of information across these different TRs is plagued by obstacles that have proven difficult to overcome. . The G20 leaders committed in June 2012 to develop a "global legal entity identifier (LEI) system for parties to financial transactions, with a global governance framework representing the public interest".[44] Although the LEI system has addressed initial technical inconsistencies, trade reporting faces legal obstacles

[41] Pagliari 2013a.
[42] Financial Stability Board 2014: 3.
[43] Financial Stability Board 2016b: 30.
[44] G20 2012: 8

that undermine cross-border compatibility of OTC trade reporting and the capacity of regulators to obtain a global picture of the OTC derivatives markets.

These kinds of jursidictional issues – in combination with differences in the timing and the content of the rules implemented across countries – have generated a number of heated disputes. Given the highly international nature of derivatives, it is no surprise that the FSB has noted "that resolution of cross-border issues continues to be the most significant implementation issue".[45] To address these issues, the G20 leaders agreed in September 2013 that "jurisdictions and regulators should be able to defer to each other when it is justified by the quality of their respective regulatory and enforcement regimes, based on similar outcomes, in a non-discriminatory way, paying due respect to home country regulation regimes".[46] Regulators from the largest jurisdictions such as the US and EU have signaled support for mechanisms such as "substituted compliance" and "equivalence and recognition" to solve cross-border regulatory issues, but Gravelle and Pagliari show how in practice the application of these mutual recognition tools has frequently failed to rein in the extraterritorial application of US and EU rules. Two years after the G20 commitment to defer to each others' rules, the FSB itself noted that "only a small number of jurisdictions" had made "deference determinations" to other jurisdiction's regulatory regimes.[47]

Since then, several specific decisions have been made to defer in some way to foreign jurisdictions' regulatory regimes for CCPs.[48] But the difficulties in reconciling different and overlapping regulatory regimes continue to threaten to generate fragmentation along territorial lines not just in terms of the content of regulations but in global derivatives market activity itself.[49] Already, regulators have noted that inconsistencies and cross-border issues emerging in the implementation of

[45] Financial Stability Board 2014: 26.
[46] G20 2013:17.
[47] Financial Stability Board 2015c: 20.
[48] Financial Stability Board 2016b: 2, 23.
[49] Helleiner 2014a.

the G20 agenda have triggered a "reorganisation of business activities along jurisdictional lines".[50] In a July 2015 report, the FSB also emphasized that "some authorities note that the absence of deference may contribute to market fragmentation."[51].

In sum, this volume's second core theme is to call attention to the fact that implementation of the modest G20 reform agenda has been associated with many unexpected outcomes: delays, inconsistencies, conflicts between jurisdictions, and growing regulatory fragmentation. The last outcome is particularly significant. Not only does it challenge the G20's initial goals, but it threatens to undermine the globally integrated nature of derivatives markets. In this sense, this unintended consequence of the G20 agenda may have more radical consequences for derivatives markets than the aims of the initial agenda itself.

The politics of derivatives regulation after the global financial crisis

What explains both the emergence of the G20 regulatory agenda and the difficulties associated with its implementation? To address this question, we need to understand the politics that shape derivatives regulation. This subject has received less attention than the politics of regulation in other financial sectors such as international banking. Literature that does exist on the topic focuses mostly on the weak nature of public regulation before the crisis. Building on the analytical insights of some of that literature, this volume develops its third core theme: that post-2008 trends in derivatives regulation are best explained as a product of a complex interplay of transnational, inter-state and domestic political dynamics.[52]

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[50] Financial Stability Board 2014: 26.
[51] Financial Stability Board 2015a: 25
[52] This framework also builds on Helleiner and Pagliari 2011.

The transnational political context

In explaining the pre-crisis pattern of regulation, many analysts have pointed to the power and influence of a transnational private community of financiers working through various transnational private bodies such as ISDA.[53] As Spagna's chapter notes, these private actors played a central role in constructing these markets, dominating policy debates and preempting stronger official regulation. At the core of this community was the small group of well-organized dealer banks with strong material interests in OTC derivatives trading (which accounted for up to forty percent of their profits before the crisis).[54] Their influence was strengthened by the lack of expertise and incentives among politicians to challenge their preferences, as well as by their ability to secure access to leading technocratic financial officials with whom they shared a common background, expertise, and worldview shaped by neoliberal ideology and modern finance theory.[55]

How influential have these transnational private groups been over the direction of regulatory reforms in the derivatives sector in the post-crisis period? As noted earlier, ISDA and the leading dealer banks have worked closely with public authorities to assist in the implementation of core goals of the G20 reform agenda. But the dealer banks have also continued to lobby fiercely against reforms that might challenge their central role in the markets. As a number of chapters in this volume note, this lobbying has helped to fend off calls for more radical reform and to water down G20 goals at the implementation phase. As Lockwood's chapter argues, existing transnational industry practices also created a certain path-dependency in some areas, making it more difficult for public actors to impose dramatically new governance regimes.

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[53] See for example Biggins and Scott 2012, 2013, McKeen-Edwards and Porter 2013, Morgan 2008, 2010, Porter 2005. See also Tsingou's (2003, 2006, 2015) important work on the G30. For a broader structural analysis of the political economy of derivatives before the crisis, see Bryan and Rafferty 2006.

[54] Statistic is from McLean and Nocera 2010: 104. See also Biggins and Scott 2013.

[55] Porter 2014, Tsingou 2003, 2006, 2015; McKeen-Edwards and Porter 2013: 43-6.

In contrast to the pre-crisis period, however, the relationship between public authorities and ISDA has not always been cooperative. For example, ISDA's willingness to cooperate with public regulators broke down when public authorities endorsed more "anti-market" forms of regulation such as the strengthening of position limits on commodity derivatives. As Helleiner's chapter explains, ISDA launched an unprecedented legal challenge in late 2011 to block the initial detailed rules of US aimed at strengthening position limits, a challenge whose success forced a major delay in the US implementation. As noted by Knaack as well as by Gravelle and Pagliari, transnational private financiers have also been very critical of developments such as the proliferation of TRs and the resort to extra-territorial rules.

From the other side, public authorities have also shown a much greater willingness to assert their authority vis-à-vis transnational private groups such as ISDA and to pursue initiatives that diverged from their preferences. For example, in 2009, they successfully pressured ISDA to change its internal governance to give greater representation to investor groups that were supportive of their goals to promote greater market transparency.[56] More generally, while ISDA and other private transnational groups continue to remain important players in the post-crisis derivatives markets, they are no longer the primary drivers of change in international rule-making. In the wake of the crisis, it was the official sector – not ISDA and the dealer banks – that took over this role in developing the new G20 regulatory reform agenda.

The speed with which the G20 agenda was developed can be attributed at least in part to the density of transgovernmental networks of financial officials with expertise in this area.[57] These networks have emerged not just through the G7/G20 process but also through a large array of international standard-setting bodies (SSBs) such as the FSB, the Basel Committee on Banking Supervision (BCBS), International

[56] McKeen-Edwards and Porter 2013: 44.
[57] Helleiner 2011, 2014a.

Organization of Securities Commissions (IOSCO), the Committee on the Global Financial System (CGFS), and the Committee on Payment and Settlement Systems (renamed Committee on Payments and Market Infrastructures). Also important have been more specialist bodies that have brought together financial officials from leading financial powers to focus exclusively on derivatives regulation. Some of these already existed before the crisis (such as the OTC Derivatives Supervisors Group created in 2005), but the majority emerged in its aftermath including the OTC Derivatives Coordination Group, the OTC Derivatives Working Group, the OTC Derivatives Regulators Forum, the OTC Derivatives Regulators Group, and OTC Derivatives Assessment Team.

The commitment of officials in these expert networks to regulatory reform after the crisis was greatly strengthened by the new prominence of a "macroprudential" framework for thinking about regulation. This framework emphasized the need to tackle the build-up of "systemic risk" and it quickly became the new conventional wisdom in official expert circles after the crisis. Within this new ideational frame, poorly regulated OTC derivatives came to be seen as a key source of systemic risk because of their interconnectedness, opacity, excessive leverage, and contribution to pro-cyclicality. Increasingly dense transgovernmental expert networks were centrally important in forging this new ideational consensus that, in turn, shaped and justified the G20 reform agenda.[58]

At the same time, it is important not to overstate the influence of these transgovernmental networks. The development of the standards drafted by these networks has been uneven and characterized by delays. One challenge has been the fragmented and weak nature of the transgovernmental institutional environment in this area. As Posner's chapter notes, there is no established transnational institution with the same kind of experience, capacity, and legitimacy to act as a focal point in

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[58] Ibid.

the development of derivatives rules that the BCBS has in the area of international banking standards. Posner argues that this contrast explains the sequencing of rule-making in the derivatives sphere, where the design of new derivatives regulatory frameworks in key jurisdictions such as the US and EU often preceded rather than followed the transnational rule-making process. It also accounts for the fact that European and US authorities have often preferred to resolve the jurisdictional issues bilaterally, rather than through transnational networks.

The unexpected delays, inconsistencies, conflicts and fragmentation that have arisen at the implementation stage also reflect weaknesses in the broader governance of international financial standards as a whole. Governance of these standards relies on soft-law and network-based institutions that lack power to effectively coordinate and constrain the actions of national authorities. As Knaack's chapter highlights, the institution at the center of efforts to coordinate the implementation of the overall G20 financial regulatory agenda – the FSB – is a toothless body of this kind. Although it has consistently declared the implementation of derivatives regulatory reforms as one of its highest priority issues, the FSB has been forced to rely only on relatively ineffectual monitoring exercises and peer reviews to promote this outcome.[59]

The Inter-State Context

In addition to showing the influence of these transnational dynamics, this volume demonstrates how post-crisis regulatory trends have also been shaped by competition and power among states. In explaining the weak nature of pre-crisis regulation, analysts often pointed to the significance of competitive deregulation dynamics between leading states. As Spagna describes in her chapter, US and British

[59] See also Knaack 2015.

officials feared that tighter official regulation would push highly mobile OTC derivatives activity to the other's territory.[60] Before 2008, international competitive pressures also encouraged many governments to incorporate ISDA's ideas into national legislation, as a way of attracting business to their markets.[61]

Several chapters in this volume illustrate how competitive pressures have continued to shape regulatory trends in the post-crisis period. Interestingly, however, these pressures have not always generated deregulatory trends. For example, Helleiner's chapter shows how competitive pressures help to explain why US authorities played the lead role in strengthening international standards. Once US authorities had decided to tighten domestic regulations, they recognized the need to push other jurisdictions to follow suit via the G20 in order to ensure a level playing field for US businesses and trading infrastructures.[62] Other jurisdictions seeking to tighten domestic regulations, such as the EU, faced similar incentives to support and follow the G20 agenda. In this way, the rapid emergence of G20 reform agenda reflected not just the successful agency of transgovernmental networks, but also national concerns about inter-state competitive pressures undermining domestic reform objectives. Competition helped to generate cooperation.

Inter-state competition and concerns for inter-state distributional consequences have also clearly influenced the politics of reform implementation. In some instances, competitive pressures helped to undermine implementation when individual jurisdictions choose not to fully comply with international standards as a means of attracting footloose business. A number of the contributors to this volume suggest that the uneven and inconsistent implementation of G20 goals in US, Europe, as well as Asia can be explained partly through this lens. In other cases, however, competitive dynamics may have accelerated the implementation of specific aspects of the G20 agenda. For example, one reason policymakers in Europe have promoted the

[60] Coleman 2003, Helleiner 2011, 2014a.
[61] Biggins and Scott 2012.
[62] See also Helleiner 2011, 2014a.

establishment of local CCPs has been to capture rapidly expanding clearing business.[63]

Inter-state power relationships have also helped to shape post-crisis regulatory trends. As Posner's chapter notes, the high concentration of derivatives market activity within the US and EU has given those two jurisdictions major leverage to dictate the main dimensions of the G20 agenda in this sector.[64] Posner notes that, for this reason, they have often simply resorted to bilateral negotiations to move the international reform agenda forward. Indeed, there is little evidence that the perspectives of other jurisdictions have influenced the development of the content of international reform agenda in significant ways.[65]

To prevent other jurisdictions from undercutting their efforts to tighten domestic regulatory standards, US and European authorities have relied not just on their diplomatic resources in the G20 and other international fora. The chapters by Gravelle and Pagliari, and Helleiner describe how they have also flexed their market power by threatening extra-territorial application of their rules and the exclusion of non-complying firms from their markets in their domestic legislative frameworks. These threats have encouraged foreign jurisdictions to endorse the international reform agenda of the US and EU, but they have also generated considerable conflict and fragmentation – including between the US and EU themselves - at the implementation stage as noted in the previous section.

Li's chapter highlights how US and EU market power has not, however, prevented some East Asian jurisdictions from implementing reforms in ways that deviate from the expectations of these leading powers and of international standard-setting bodies. Rejecting a simple passive rule-taking role, East Asian authorities have set their own autonomous pace of adapting to the post-crisis international priorities

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[63] Pagliari 2013b, Norman 2012.
[64] See also Posner 2009 for this case more generally in international financial regulation.
[65] Mügge 2014: 64-5.

and "cherry-picking" among different parts of the G20 derivatives agenda in order to promote the development of local derivatives markets and to increase their share of the fast-growing regional derivatives markets in the area. Li shows how emerging markets in East Asia have also skillfully resisted external pressures by leveraging the power of US and European private dealers based in their region and exploiting differences between EU and US rules. In these ways, these less powerful states have demonstrated not just their desire but also their considerable ability to carve out "power-as-autonomy" to develop a more independent regulatory path in ways that has contributed to the uneven implementation of G20 goals.[66]

The Domestic Political Context

The chapters in this volume also point to the importance of domestic political dynamics in explaining post-crisis trends in derivatives regulation. One such dynamic is the changing levels of domestic political salience of the issue of derivatives regulation. Literature on the pre-crisis period highlighted how the subject of derivatives regulation rarely attracted much sustained attention among politicians or the wider public in the US and Europe where most trading took place. This low domestic political salience of the issue allowed dealer banks and expert officials to dominate policymaking in those jurisdictions before 2008. There were occasional exceptions when crises or scandals generated brief public debate, but the latter did not last long enough in order to generate sufficient domestic support for tighter public regulation.[67]

The chapters in this volume show how this situation changed dramatically within both the US and the EU in 2008 because of the severity of the financial crisis and the use of taxpayer money to bail out institutions whose troubles were linked to

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[66] For the concept of "power as autonomy", see Cohen 2006.
[67] Pagliari 2012, 2013a, Tett 2009.

derivatives. As Helleiner's chapter notes, public attention was also drawn to derivatives markets by the 2008 and 2010-11 spikes in politically sensitive energy and agricultural prices that were blamed in part on unchecked speculation in commodity derivatives markets. In the face of outrage from the general public, domestic politicians demanded tighter regulation and heads of state placed the issue on the agenda of the high profile G20 leaders meetings.

If the higher domestic political salience of derivatives helped generate the G20 reform agenda, it also complicated the politics of implementation. Agreements reached at the international level were not always fully compatible with the legislative initiatives launched by elected politicians in US Congress or the European Parliament who were suddenly more interested in this issue but had a more parochial focus.[68] Gravelle and Pagliari show how greater domestic concerns about systemic risk and costs to be borne by taxpayers also encouraged rules about extraterritoriality that contributed to conflict and fragmentation at the international level.[69] Knaack's chapter shows how the difficulties in the TR reform agenda can be attributed in part to obstacles imposed on new kinds of international cooperation by domestic legislatures.[70]

At the same time, as distance from the crisis grew, the domestic political salience of derivatives began to decline somewhat in the US and EU. This development did not, however, always make the implementation of G20 goals easier. A number of chapters show how lower levels of issue salience and the shift towards the more technical phase of implementation often provided greater space for private sector opponents of stricter rules to exercise greater influence over outcomes.

Post-crisis regulatory trends have also been strongly shaped by patterns of interest group mobilization within countries. Analyses of the pre-crisis period show

[68] Knaack 2015.
[69] See also Pagliari 2013b; Mügge 2014: 55, 65-6; Helleiner 2014a.
[70] See also Knaack 2015.

how dealer banks were the interest group most involved within US and European domestic discussions about derivatives regulations before 2008. They remained very involved after the crisis, helping to shape domestic legislation as well as to block, water down, or delay the domestic implementation of initiatives that did not serve their interests.[71] But contributors to this volume also highlight the active roles of a broader set of domestic interest groups. For example, Pagliari's chapter shows how some US reforms opposed by the dealer banks were strongly supported by others in the financial industry such as organized exchanges and interests associated with the buy-side of the market, such as institutional investors.[72] Helleiner also notes how the initiative to tighten position limits in commodity derivatives markets was strongly backed by broad-based US domestic coalition of consumer advocacy groups, international development organizations, environmentalists, and many producers, distributors, retailers and end-users in the agricultural, food and energy sectors.[73]

At the same time, in their efforts to dilute tough reforms, the dealer banks successfully mobilized new alliances with corporate "end-users" outside the financial sector whose costs would rise as a result of regulatory initiatives.[74] When business lobbies were more unified in this way, Pagliari shows that they were usually more successful. Li's analysis of the implementation of the G20 agenda in East Asia also points to the importance of "new" financial interests associated with emerging local derivatives markets and established transnational dealers in generating complex dynamics that influence the distinct path taken by these jurisdictions.

A final domestic political variable shaping the content and pace of implementation of post-2008 reforms is the domestic institutional context within which rule-making has taken place. For example, the implementation of Dodd-Frank has been delayed and complicated by the need for coordination among multiple US

[71] See for example Morgan 2010, 2012, Litan 2010.
[72] See also Helleiner 2011, 2014a; Morgan 2012.
[73] See also Clapp and Helleiner 2012, Helleiner and Thistlethwaite 2013.
[74] See also Pagliari and Young 2013, 2014.

regulatory agencies with diverging priorities and mandates and internal divisions, such as the SEC, CFTC, Federal Energy Regulatory Commission, Office of the Comptroller of the Currency, Federal Reserve, and Federal Deposit Insurance Corporation.[75] Pagliari's chapter also highlights how implementation has been made even more difficult by the unwillingness of Congress to increase the resources available to regulators such as the CFTC. The analyses in this volume also bring out how the development of new European legislation for OTC derivatives has been slowed considerably by the institutional complexities of European cooperation.

To explain both the emergence of the G20 regulatory agenda and the difficulties associated with its implementation, the chapters in this volume thus suggest the need for analysts to examine a complicated set of interacting transnational, inter-state and domestic political dynamics (see Figure 2). Many of these are quite distinctive from the dynamics that shaped derivative regulation before the crisis. Others are familiar to those who have studied pre-crisis regulatory politics, but some of these dynamics – such as competitive pressures or the degree of power of transnational private elites – have manifested themselves in new ways in the post-crisis environment.

Figure 2: The Political Dynamics of Post-2008 Derivatives Regulation

Political Context	**Key Drivers of Change**
Transnational	• Transgovernmental networks and institutions (G20, FSB, SSBs) • Transnational private interests and institutions (ISDA,

[75] See also Knaack 2015.

	authoritative practices)
Inter-State	• Competition for market share between jurisdictions • Market power and priorities of the US and EU • Power-as-autonomy of weaker states
Domestic	• Changing levels of political salience • Patterns of interest group mobilization • Domestic institutional context

Conclusion

Alongside its detailed analyses of various aspects of the politics of derivatives regulation after the 2008 crisis, this volume develops three core themes. First, while G20 leaders have endorsed greater public regulatory control over derivatives markets, it is important not to overstate the degree of change embodied in this agenda. The G20 goals have been primarily focused on enhancing the transparency and resilience of the markets rather than constraining their growth. The G20 leaders have also endorsed continued delegation of key governance functions to profit-seeking private actors and private rule-making in ways that are reminiscent of the pre-crisis world. Despite the severity of the crisis, the G20 leaders' agenda was thus not a manifesto to change the prominent place of derivatives in the world economy in a radical manner.

Second, many unexpected outcomes have arisen as policymakers set out to implement the G20 reform agenda. Implementation has been inconsistent across jurisdictions and has been subject to unanticipated delays. Considerable tensions have also emerged between jurisdictions as the timing and content of their respective rules have diverged and as governments have resorted to extra-territorial application of their new rules. These developments, in turn, have resulted in a growing fragmentation of the regulation of derivatives markets, a quite different result than G20 policymakers initially intended and one with potentially larger significance for the trajectory of global economic governance after the crisis.

Finally, both the emergence of the G20 reform agenda and its implementation have been influenced by a complex combination of transnational, inter-state, and domestic political dynamics. At the transnational level, outcomes have been shaped by transgovernmental networks and transnational private financial groups, each with their own institutions. Important political dynamics have also included intense inter-state competition for market shares as well as inter-state power plays involving the projection of power by the US and EU and the protection of autonomy by less powerful countries. Post-crisis regulatory trends have also reflected changing levels of domestic political salience of derivatives regulation, patterns of domestic interest group mobilization, and distinctive domestic institutional structures.

These three core themes are developed through detailed analyses of a number of aspects of the politics of post-2008 derivatives regulation. In chapter 2, Posner examines the dynamics of international regulatory coordination between the US and EU. In chapter 3, Gravelle and Pagliari explore how these two jurisdictions have implemented the G20 agenda in an extraterritorial way. In chapter 4, Li shifts the focus to the role of East Asian countries in the post-2008 reform process. In chapter 5, Pagliari zeros in on the US case to explore the role of domestic interest groups in the politics of implementing the Dodd-Frank Act. The last three chapters explore in more depth three core issue areas in post-2008 reform process: the push for greater use of central clearinghouses (Lockwood's chapter 6), stronger position limits over commodity derivatives (Helleiner's chapter 7), and the new information reporting requirements (Knaack's chapter 8). Before turning to these detailed analyses, however, Spagna's chapter 1 provides important background history of the growth of the derivatives and their regulation before 2008 as well as their contribution to the 2008 crisis.

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