

Remarks of Chairman J. Christopher Giancarlo before the Sims Lecture At Vanderbilt Law School, Nashville, Tennessee

Derivatives Regulatory Reform: A Principles-based Software Upgrade

April 13, 2018

Thank you. Good afternoon.

I thank Dean Guthrie and the faculty of Vanderbilt Law School.

I especially thank the Sims family for their continued commitment to the lecture series and to the law school. The Cecil Sims Lectures are important. They are followed closely by legal practitioners and scholars the world over.

When I left these Vanderbilt halls thirty-four years ago, I never dreamed that I would be asked back to give the Sims Lecture. It is a profound privilege and I am humbled by it.

Thank you for inviting me here. This law school continues to earn national prominence based on its principles-based education and breadth of scholarship. I am impressed with its forward looking curriculum, including its new program on law and innovation, preparing lawyers for a digital 21st Century. That is part of what I want to talk to you about today.

Introduction: A Lifetime of Change

First, a word about Cecil Sims. He was born in 1893, two generations removed from the Civil War. He grew up when the past still had a strong hold on the South. Upon graduation as valedictorian from Vanderbilt Law School at age 19, and admission to the bar in 1914, he joined the Army and the First World War. At his death in 1968, he had lived through vast

changes in the South and in the world, through the Second World War, Korea, and Vietnam. A year after he died, Neil Armstrong stepped on the moon.

Cecil Sims saw a rapidly changing world in culture, communication, technology and much more. He also the law itself change, evolve, reflect the changing needs of society and the pace of technological evolution.

In 1957, Mr. Sims wrote a visionary article for the American Bar Association Journal. The title was “Lawyers and the Classics: The Spreading Technological Illiteracy.” He argued that lawyers need a far-ranging education that included the law and information technology, but also history, classics, philosophy and more.[1]

Why? So a lawyer would assume his or her place as an “architect in public affairs.”[2] Let’s explore some public policy architecture that Mr. Sims would consider if he were with us today.

What impact do the transformational power of digital technology and the accompanying social evolution have on:

- The adaptability of law and regulation for changing modes of trade and commerce,
- The work of traditionally principles-based agencies like the US Commodity Futures Trading Commission, and
- The relevance of a principles-based approach to legal education that Cecil Sims received and is present today at this law school?

I want to address these questions this afternoon.

The pace of technological change in the course of my own professional career has been stunning. At age twenty-one, I was employed for several months during the first term of Margaret Thatcher’s British government as a researcher for Sir Ronald Bell,

MP.[3] I wrote research reports outside his office on a manual typewriter. He forbid use of the new memory typewriters, telling me that “word processing will allow governments to snuff out liberty through thousands of pages of legislation that no one will ever read.”

Alas, time and technology marched on. When I left Vanderbilt for a Wall Street law firm in 1984, the technology that was changing the practice of law was Federal Express that compressed the legal process into overnight hours. In the thirty-five years since, digital communications technology has pinched the timeframe into milliseconds.

The Digitization of Financial Markets

So much of our world today – from information to journalism, to music to manufacturing to transportation to commerce to agriculture, even legal services – is undergoing a digital transformation.[4]

It should be no surprise then that our financial markets are going through the same digital revolution. In my thirty years practicing law and in business operating derivatives trading platforms, and now four years as a market regulator, I have seen how emerging technologies are impacting trading markets and the entire financial landscape with far ranging implications for capital formation and risk transfer. They include machine learning and artificial intelligence, algorithm-based trading, data analytics, “smart” contracts valuing themselves and calculating payments in real-time, and distributed ledger technologies that may profoundly disrupt traditional market infrastructure. These technologies are reshaping the world around us. It is no surprise that they are having an equally transformative impact on commercial law, with some of the best new scholarship coming out of this law school.

[5]

Yet, technology may be having an even more fundamental change – a cultural one. Two months ago, I was called to testify before the Senate Banking Committee alongside SEC Chairman Jay Clayton. The topic was virtual currencies.

As you might expect, I first submitted an extensive forty-page written testimony including attachments and detailed footnotes.

[6] I was up to speed on the issue because our agency, the CFTC, had spent much time grappling with the recently self-certified launch of Bitcoin futures by two of our registered futures exchanges.[7]

Yet, in the weekend before the hearing, I reflected on conversations about Bitcoin I had participated in during our New Year's ski vacation with my kids, nieces and nephews - all Millennials and GenZers. I spent time online reading blogs and watching videos about virtual currencies. The more I watched, the more I saw that the energy and momentum behind virtual currencies was not just driven by technological innovation. There was something else going on – something cultural.

I decided to use my opening oral remarks at the Senate hearing to make a point. Let me take you to Capitol Hill. I began with the following statement:

Thank you, Chairman, Ranking Member and distinguished Senators.

I have submitted a written statement for the record that details the CFTC's work and authority over virtual currencies.

With your permission, I'd like to begin briefly with a slightly different perspective.

That is....as a dad.

I am the father of three college age children: a senior, a junior and a freshman.

During their high school years, we tried to interest them in financial markets. My wife and I set up small brokerage accounts with a few hundred dollars they could use to buy stocks. Yet, we haven't been able to peak their interest in the stock market.

I guess they're not much different than lots of kids their age.

Something changed last year, however.

Suddenly, they were all talking about Bitcoin. They are asking me what I thought and should they buy it.

One of their older cousins owns Bitcoin and they were all excited to learn about it. So were their friends.

I imagine that members of this Committee may have some similar experiences in your own families.

It strikes me that we owe it to this new generation:

- To respect their enthusiasm about virtual currencies with a thoughtful and balanced response, not a dismissive one.**
- To crack down hard on those who try to abuse their enthusiasm with fraud and manipulation.**
- To thoroughly educate ourselves – and the public – about this new innovation.**
- To make good policy choices and put in place sound regulatory frameworks to reduce risk for consumers.**

As I then returned to my formal remarks, something remarkable happened: my Twitter account exploded, gaining thousands of followers in minutes and over 40,000 in the next few days. My remarks were celebrated by virtual currency fans around the globe, who devised clever memes like “#CryptoDad and #FUDBuster[8] and photo shopped my likeness into dozens of online images and videos.

I neither expected nor desired that a few words spoken during a Senate hearing broadcast on C-SPAN would lead to an Andy Warhol “fifteen minutes of fame.”

Nor was I – or am I – a virtual currency evangelist.

Technology as Agent of Social Change

The cryptocurrency universe sadly contains a large share of get rich quick schemers, shady entrepreneurs and transactions in illegal goods.[9] It also appears to have a growing contingent of professional, institutional users.[10] Yet, it is also favored by advocates for the poor and unbanked, libertarians, pacifists, Occupy Wall Streeters, earnest tech geeks, economics buffs, long-term investors and many, perhaps naïve, but well-meaning young people.[11]

What I had acknowledged at that Senate hearing is the existence of a community that views technology as an agent of social change. Many of them have come of age during the 2008 financial crisis - the same crisis to which Bitcoin had emerged in response.[12] They have lost faith in the leadership that presided over that mess, in the same way that that fifty years ago the Baby Boomers lost faith in their parents' leadership of wars over civil rights and Vietnam. They have also lost faith in traditional news media that more often lampoons their interest in technology than tries to understand it.

Cecil Sims said we should look for “parallels in history.”^[13] Here parallels are evident. Just as the Baby Boomer generation strove to change the world through social change – sex, drugs, and rock n’ roll. The new generation of Millennials and GenZ sees generational change driven by technological disintermediation of distrusted institutions. They see virtual currency – along with social media - as a means to bypass control by a failed generation of leadership.

How much of our political and social institutions have lost the faith of these new generations? Will they also lose faith in enduring principles of law – the same principles taught here at Vanderbilt. How does market regulation accommodate such profound generational and technological change?

A Principles-Based Approach to Market Regulation

A quick word about the CFTC that I have the privilege to chair. It was founded as an independent agency in 1975. It is composed of 5 commissioners, chosen by the President and confirmed by the Senate. No more than three of the five Commissioners can be of the same political party as the President. It has close to seven hundred career staff. The CFTC regulates markets for derivatives trading, such as exchange traded futures and options on oil, natural gas, wheat, corn, gold, silver, and other commodities. It also oversees some of the world’s largest financial markets in listed futures and over-the-counter swaps on rates of interest, credit default, and foreign exchange. For the most part, these are markets for commercial risk transfer and institutional trading.

Historically, the CFTC has been a principles based regulator relying on clearly stated principles and outcome-focused, high-level precepts to achieve desired regulatory outcomes, rather than compliance with detailed and prescriptive rules.^[14] The agency began to stray from that approach in some of its

implementation of swaps market reforms under the Dodd-Frank Act (Dodd-Frank). [15]

I believe the CFTC must reaffirm its historic character as a principles-based regulator. The relentless advance of technology and evolution of market structure requires a flexible, principles-based approach to oversight of some of the world's most dynamic commodity and financial derivatives markets,

When it comes to the challenge of crypto, it is clear that our governing statutes were not designed for this technology. The CFTC's governing law, the Commodity Exchange Act (CEA)[16], was first passed in 1936 and has been amended several times since then. Unsurprisingly, it contains no reference to virtual currencies. It is like an old computer operating system that struggles to support this new and complex application. In the absence of a legislative update, existing law and regulation must be interpreted on the basis of core principles to keep pace with technological change.

The Regulation Development Lifecycle

Let me now turn to a broader challenge for principles-based regulation: the continuous process of reviewing, updating and optimizing policy applications amidst constant market evolution and technological change. Specifically, I want to talk about ongoing steps to improve the CFTC's initial implementation of swaps market reforms under Dodd-Frank.

We now have more than four years of U.S. experience with the CFTC's initial swaps reform and their varied strengths and shortcomings. Four years provides a statistically significant sample size, if not a long period of history, to evaluate the effects of these reforms and their implementation. Based on that experience, we can now consider ways to better implement

Congressional reforms and optimize achievement of the goals of the Pittsburgh Summit.

Why should regulators improve and optimize their rule frameworks? Well, let's consider the evolution of computer software.

The modern software industry is built upon a range of common methodologies and developmental frameworks, such as the software development life cycle, the purpose of which is to preserve the value of software over the time. That value can be enhanced by addressing flaws, enhancing functions, meeting additional requirements, becoming easier to use, more efficient, accommodating newer technology and expanding the user base.

In many ways, regulatory frameworks are like software applications. They are a set of rules and algorithms that direct action to certain desired ends. Often, they guide behavior toward a range of functions, tasks or activities determined to be in the public interest.

Regulatory frameworks also have a development cycle. In the United States context, the cycle begins with Congressional passage of an authorizing statute. Then, it advances through regulatory agency action subject to relevant administrative procedural requirements, including public input and comment.

The maintenance stage is in the hands of regulatory agencies, which gather data and empirical information and can propose rule changes or provide rule relief as appropriate. Their task is also to preserve the value of the core regulatory framework over time. The value can be enhanced by expanding the user base, meeting additional requirements, improving features, clarifying terms of use and increasing efficiency. In the case of some regulatory frameworks, for example CFTC's authorizing statute, the maintenance process is entering its eighty-third year.

Like software users, market participants will always look to participate in well-designed, regulatory frameworks. Trading counterparties seek neither the least nor the most regulated marketplaces, but market places that have the right balance of sensible, objective and well-maintained regulation – in other words: good software. It is in the interest of the United States to achieve such balance.

Financial regulators have a duty to apply the policy prescriptions of their legislators in ways that enhance markets and their underlying vibrancy, diversity and resiliency. That duty also includes the responsibility to continuously review past policy applications to confirm they remain optimized for the purposes intended. It means adopting a forward-looking approach that considers the impact of technological innovation and anticipates changing market dynamics.

Similarly, futures exchanges should continuously review and refresh their futures products. That means a continuous process of reviewing contract design and market conditions and taking affirmative steps to foster trading liquidity, enhance price convergence and deter fraud and manipulation. It is in the interest of the United States that US Dollar-denominated markets for commodity futures remain deep, liquid, well-functioning, diversified and globally competitive. The CFTC has an important role in supporting that vital national interest.^[17]

Swaps Reform Version 2.0

The CFTC has been a consistent leader amongst regulators of the world's major swaps and derivatives markets in enacting effective regulation and oversight. It was the first and it remains the most successful implementing body of the core G20 swaps reform here and abroad.

The CFTC remains fully committed to the cause of swaps market reform. That commitment includes a responsibility to pursue improvements to the CFTC version 1.0 swaps regulations that enhance market health and safety while respecting the spirit of global swaps reform and the law embodied in the Dodd-Frank Act. Yet, within that commitment, we must also incorporate lessons from the CFTC's initial reform efforts into a new and improved framework: "Swaps Reform Version 2.0". This is something that I will talk further about in the weeks to come.

Conclusion

In drawing to a close, I want to address the question I asked earlier: how do we accommodate profound technological and generational change?

As CFTC Chairman, I believe the transformational power of technology and the social evolution that accompanies it necessitates the adaptability of law and regulation for changing modes of trade and commerce. I believe that the CFTC, as regulator of the world's largest and most dynamic commodity and financial derivatives markets must continue its historic character as a principles-based regulator. That includes continuously reviewing past policy applications, including the CFTC's initial Dodd-Frank reform implementation, to confirm that it remains optimized for the purposes intended.

This is how a principles-based regulatory approach guides our response to market and technology evolution. It is part of the CFTC's historic DNA. It is part of keeping faith with new generation of market participants. And it is part of keeping market regulation and oversight alive and vital.

And, yes, I believe a principles-based education is the right course for a life in the law, just as it was for Cecil Sims. This has

been my experience as a Vanderbilt lawyer through a career spent amidst rapid technological change.

Seventy years ago, in a similar setting, Judge Learned Hand gave the Holmes Lecture at Harvard Law School. As a graduate of Harvard, he thanked the school and its faculty for making his legal career possible. He said, “The memory of those (teachers) has been with me ever since. Again and again they have helped me.”

He then paused, looked over the audience, as said “Go ye and do likewise.”^[18]

Tonight, as a graduate of Vanderbilt Law School, I echo those words. And memories of many extraordinary Vandy professors, who encouraged me to look to the future while drawing on enduring principles from the past.

That is the task for each one of us, as graduates and as professionals. We must never live in fear. Rather, we must be a constant reminder of the best in the law: truth, intellectual rigor and courage to adapt to a changing world on the foundation of a principles-based education.

Cecil Sims understood that. And, each year, the Sims lecture reminds us of his legacy and that of Vanderbilt Law School.

Thank you.

[1] Cecil Sims, *Lawyers and the Classics: The Spreading Technological Illiteracy*, 43 A.B.A. J. 31 (Jan. 1957).

[2] *Id.* at 31.

[3] Sir Ronald McMillan Bell, QC MP (14 April 1914 – 27 February 1982) was a distinguished barrister (Queens Counsel) and Conservative Member of Parliament in the United Kingdom,

representing South Buckinghamshire from 1950 to 1974 and Beaconsfield from 1974 to 1982.

[4] See *generally* Erik Brynjolfsson & Andrew McAfee, *The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies* (2014); Martin Ford, *Rise of the Robots: Technology and the Threat of a Jobless Future* (2015).

[5] The author commends the scholarly work of Vanderbilt Law School professors, Lisa Schultz Bressman, in the area of Federal administrative and regulatory agency law, and Yesha Yadav, in the area of financial markets and the impact of emerging technology thereon.

[6] See the written testimony of author before the U.S. Senate Banking Committee: *Virtual Currencies: The Oversight Role of the U.S. Securities and Exchange Commission and the U.S. Commodity Futures Trading Commission*, Hearing Before the S. Comm. on Banking, Housing, and Urban Affairs, 115th Cong. 1-42 (Feb. 6, 2018) (statement of J. Christopher Giancarlo, Chairman, U.S. Commodity Futures Trading Comm'n), <https://www.cftc.gov/PressRoom/SpeechesTestimony/opagiancarlo37>.

[7] See Press Release 7654-17, CFTC Statement on Self-Certification of Bitcoin Products by CME, CFT and Cantor Exchange (Dec. 1, 2017), <https://www.cftc.gov/PressRoom/PressReleases/pr7654-17>.

[8] In the parlance of Twitter, FUD stands for “Fear, Uncertainty, and Doubt.”

[9] As the head of an agency with a consumer education mandate, I look to utilize my newfound Twitter following to warn of investment risks through cautionary posts and links to CFTC consumer protection materials.

[10] Institutional market share in cryptocurrency trading already exceeds retail market share, according to recent research by TABB Group. See Monica Summerville, *The Wall of Institutional Money Waiting to Flood Cryptocurrency Trading*, TABBFORUM.COM (Apr. 6, 2018), https://tabbforum.com/opinions/the-wall-of-institutional-money-waiting-to-flood-cryptocurrency-trading?print_preview=true&single=true.

[11] See Eric Sammons, 10 Types of Crypto fans – Which are You?, DASHFORCENEWS.COM (Sep. 27, 2017), <https://www.dashforcenews.com/10-types-of-crypto-fans-which-are-you/>.

[12] See Cryptocurrency a Response to Financial Crisis, Says CEO, WALL ST. J., June 14, 2016 (statement of Blythe Masters), <https://www.wsj.com/video/cryptocurrency-a-response-to-financial-crisis-says-ceo/D28A8012-413F-447E-AA5A-F1911BA64FC3.html>.

[13] Sims, *supra* note 1, at 33.

[14] See generally Bart Chilton, Commissioner, U.S. Commodity Futures Trading Comm'n, Let's Not "Dial M for Merger": CFTC's Principles-Based Regulation – A Success Story, Speech Before the Futures Industry Association, Law and Compliance Luncheon, The Downtown Association - New York, New York (Nov. 13, 2007), <https://www.cftc.gov/PressRoom/SpeechesTestimony/opachilton-4>.

[15] Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, §§ 721-774, 124 Stat. 1641, 1641-1807.

[16] Commodity Exchange Act, Pub. L. No. 74-675, 49 Stat. 1491, (1936).

[17] On April 5th through 6th, 2018, the CFTC and the Kansas State University hosted the first-ever economics conference for U.S agricultural futures markets, focused on current macro-economic trends of American agricultural futures markets, including the role of speculators and high-frequency traders, futures contract design, cash price convergence and detecting fraud and manipulation

[18] LEARNED HAND, THE BILL OF RIGHTS: THE OLIVER WENDELL HOLMES LECTURES 77 (1958).