

SPEECHES & TESTIMONY

Remarks of Chairman J. Christopher Giancarlo before Derivcon 2018, New York City, New York

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Introduction

Good morning. Thank you for that warm introduction.

My compliments to the Wholesale Markets Brokers' Association Americas (WMBAA) for creating the original Sef-Con and to Anthony Parrotta and Tabb Group for transforming it into Deriv-Con. There is nothing like this conference in terms of looking at the functioning and health of global markets for swaps trading.

Swaps Market Notional Amount: Fog of Confusion

Well, here we are. It is 2018 – ten years after the global financial crisis. Sometimes, years must pass to gain perspective. For a moment, let's recall that year, 2008. Many in this room remember it very well, maybe too well. It continues to haunt us.

You may remember that, then, as the economy sunk into recession, policy makers, bankers, lenders, and investors rapidly, frantically, made decisions to save the system. Well, they did. Those were monumental decisions, with national and global impact. The decisions also had a lasting, powerful impact over time. We live with those decisions a decade later.

The phrases, "interconnection" and "interdependence" have become part of our vocabulary. Former Fed Chairman, Alan Greenspan, once told a Congressional committee that in 2008 we had reached "an intellectual turning point."¹

But, since then, economists and historians have examined those decisions, looking at the data and the information available. And, there has been a common theme: that the information often was vague, hard to understand, even inflated, bloated, or misunderstood.

In fact, sometimes the data may have been wrong, or, at least, wrongly used. Often times, it was misleading.

Some of the assessments have been harsh. Peter Wallison thinks there was lack of transparency, that figures were hidden behind other statistics, like a "shadow."² He talks about venality, irrationality, and competence. There are questions about perspective, reporting, and credibility. Elsewhere, Wallison has called the policies of that time based on "a false narrative."³ Others, like journalist Gillian Tett, claim that economic models often processed the wrong data. Andrew Sorkin found that the swap assets of companies like AIG were valued with wildly disparate figures⁴ and many of the institutions labeled "too big to fail" and those allowed to fail, like Lehman Brothers, were wrongly assessed.

The worry is that there was a fog or distortion or myopia or fear that mis-framed the financial picture. In fact, in his post-financial crisis commentary, Mervyn King, the former governor of the Bank of England, sees the data and decision-making in 2008 as something like medieval “alchemy,” where mythology, tradition, expectation, and misunderstanding prevailed.⁵

Clearly, as earthshaking as was the crisis, its impact was exacerbated by the lack of a more clear, accurate, and honest assessment of risk, value and markets. This was particularly the case in the over-the-counter derivatives markets, where the notional figures are in the hundreds of trillions of dollars, numbers without meaning, barely comprehensible for any of us.

And that vagueness of risk-based market sizing has remained a problem. In 2012, Congressman Jack Kingston, then a member of the House Committee on Appropriations wrote to the Commodity Futures Trading Commission (CFTC). He asserted that “notional value” was not an accurate measurement of systematic risk. He voiced concern that the notional numbers would lead Congress to appropriate money unwisely, spending scare resources in the wrong places. He said that, “innocent farmers, ranchers, and producers” would “pay the price” for appropriations that were based upon such misrepresentative numbers.⁶ He asked for new measurements that would, in his words, “set the record straight” and help Congress properly apportion taxpayer resources.

And the record needs to be set straight. Notional amounts are still used to describe the size and risks of the global interest rate swap (IRS) markets. Recent examples include the headline, “*EU Derivatives Market Worth €453T, ESMA Analysis Reveals*,”⁷ and the following text: “*the notional value of OTC derivatives contracts outstanding was \$630 trillion... which was eight times greater than global output and 6.5 times larger than outstanding debt securities.*”⁸ Quotations like these give a misleading picture of the true size of markets for swaps and derivatives and sow confusion about their systemic risk profile.

Ladies and gentlemen: swaps have a problem of large numbers. We have known it for a long time. Sizing the global swaps markets in hundreds of trillions of dollars has done nothing to bring clarity to newspaper accounts, policy discussions in Congress, or regulatory policy setting in the decade since the financial crisis. Rather, it more often confuses the issue and hinders dispassionate consideration and sound policy setting.

That is why we must bring some clarity to how to accurately size contemporary swaps markets.

Last year, in appointing Dr. Bruce Tuckman as CFTC Chief Economist, I asked him to develop a more accurate measurement of the swaps market, specifically focused on its risk transfer function.

He and his staff have done so in a paper published this morning on CFTC.gov. They have put forward a new paradigm, a shift in perspective, a new way of seeing. I urge you to read their paper.

And if economists’ academic papers are not your thing, then listen to Dr. Tuckman’s podcast on “CFTCTalks - Episode 29” that will be released tomorrow.

A New Paradigm: Entity-Netted Notional Amounts

In his presentation, Dr. Tuckman explains why notional amount is not a good measure of the size of the IRS market, that is, of the magnitude of risk transfer through IRS.

First, since a significant fraction of forward rate agreements (FRAs), overnight index swaps (OIS), and swaptions are of very short term, notional amount exaggerates the extent of risk transfer through those products.

Second, since IRS trading conventions leave pairs of counterparties with risk-offsetting long and short positions, notional amount—which adds longs and shorts—dramatically overstates risk transfer between pairs of counterparties.

Dr. Tuckman's analysis, therefore, introduces the concept of entity-netted notionals (or "ENNs"). ENNs are designed as a means of accurate measurement of risk transfer in swaps markets.

By netting longs and shorts between pairs of counterparties, within each currency, ENNs capture the market risk transfer in IRS markets much more accurately than notional amounts. Furthermore, empirical calculations of ENNs reveal that there is a tremendous amount of such netting in the IRS market. They thereby provide a new element of realism and accuracy.

So, here is a sneak preview from Dr. Tuckman's analysis:

- For all U.S. reporting entities as of December 15, 2017, notional amount across all currencies and across the dominant IRS products, namely, fixed-for-floating swaps, FRAs, OIS, and swaptions, is \$179 trillion.
- Expressed in 5-year risk equivalents, that notional amount falls to \$109 trillion.
- Now, applying Tuckman's ENNs analysis, the figure drops to \$15 trillion, or just over 8% of notional amount.

Measured with ENNs, the \$15 trillion size of the interest rate swap market is of the same order of magnitude as other fixed income markets, such as:

- the US Treasury market at \$16 trillion,
- the corporate bond market at \$12 trillion,
- the mortgage market at \$15 trillion, and
- the municipal securities market at \$4 trillion.⁹

Suddenly, at \$15 trillion, the IRS market is more normalized and intelligible as part of the US economy.

To describe ENNs intuitively, imagine that each pair of swap counterparties established its net interest rate risk position with bonds instead of swaps. More precisely, within each pair of counterparties, the counterparty that is net long has purchased a 5-year equivalent risk position in bonds from the counterparty that is net short. Then, the sum of those hypothetical bond positions across all pairs of counterparties is a measure of the size of the market and is equal to the ENNs as defined in this paper.

A lot of the difference between the IRS market's notional amount and its ENNs can be explained by the great extent to which bank and dealer interest rate books are cleared through central counterparties (CCPs). In other words, clearing increases netting opportunities, which, in effect, decreases the size of the IRS market.

Yet, while it has been long recognized that notional amounts are not indicative of size, they continue to be used in important regulatory calculations, like capital requirements and thresholds. Revealing the extent to which notional amounts overstate size, as measured by ENNs, hopefully should lead to consideration of the use of more suitable metrics of IRS risks and, more generally, of derivatives risks.

For reasons explained in Dr. Tuckman's paper, ENNs are not intended to measure counterparty credit risk -- metrics like gross or net market value and gross or net credit exposure do that. Nor do ENNs serve to quantify operational risk, which may remain better understood by notional amount. Nevertheless, ENNs are a new and, likely, better measure of IRS market size based on risk transfer.

Now, some may ask whether the ENN analysis is suitable for calculating regulatory thresholds such as for registered swap dealing activity. While that may be worth academic consideration, it was not my intention in directing Dr. Tuckman's research to come up with a specific alternative to the CFTC's current swap dealer de minimis calculation methodology. Rather, the purpose was far more broadly to bring greater clarity to the public understanding of the global derivatives markets.

The ENN analysis can be extended in several ways. First, ENNs can be calculated for other large markets, like credit default swaps and foreign exchange derivatives. Second, ENNs can increase understanding of how various sectors use derivatives. Perhaps more importantly, ENNs can support more precise analysis and policy development concerning swaps and other derivatives and their impact on systemic stability in global financial markets.

For now, Dr. Tuckman and the CFTC's Office of Chief Economist invites thoughtful consideration and discussion of the concept of entity-netted notionals. We look forward to hearing from a broad range of academic, commercial, regulatory and policy-setting communities about how ENNs may best serve as a suitable means of accurate measurement of risk transfer in global swaps markets.

Reg Reform 2.0: First Step

I began by marking this as the tenth anniversary of the financial crisis. In response to the crisis, Congress enacted the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (Dodd-Frank). Congress required that swaps trading be subject to a comprehensive regulatory framework in the same way that other asset classes like equities, bonds, and futures, were subject to regulation. More specifically, under Title VII of the law, Congress mandated that swaps trades be centrally cleared, margined, reported and executed on registered platforms.

Although a 2,300 page law, Title VII was relatively straightforward and concise. Congress proposed a principles-based approach over a prescriptive one in keeping with the regulatory tradition of the agency to which it assigned oversight of most of the swaps market.

Thus was the impetus for the CFTC's implementation of a range of swaps market regulation - an implementation that can be considered as swaps reform version 1.0. The CFTC advanced ahead of other regulators in implementing the key reforms: centrally clearing, transaction margining, transaction reporting and regulated execution. The CFTC's determination and dispatch were remarkable. Overall, CFTC Reg Reform 1.0 served to implement the bulk of Dodd-Frank's swaps reforms and demonstrate their core value proposition.

Yet, in a number of respects, the specifics of the implementation were less satisfactory. They contain some underlying defects that still need to be addressed. My predecessor often admitted the need for "tweaks" and "fine tuning." My criticism has been less muted, especially in the area of swaps execution,¹⁰ where the agency veered most from the spirit of Dodd-Frank, adopting rules for swaps that were highly prescriptive and disproportionately tailored on decades-old futures market rules.

Now, a certain amount of error had to be expected from the first roll out of regulatory reform, given the breadth of the ruleset change and the speedy timeline for implementation. This is why large public policy projects – like software applications – usually have a follow-on effort to fix flaws and replace hard patches in the first version that designers did not envision. Version 1.0 of any application usually leads in short order to version 2.0.

In the case of the CFTC's swaps reforms, the four years since the implementation offer ample experience, better quality data, and market reaction upon which to analyze and reconsider the efficacy of the rules. We can see the flaws and know what bugs need to be fixed to better achieve the purposes of swaps market reform.

That is why we plan over the course of the coming year to put forth concepts and ideas to improve the CFTC's reform implementation. We refer to these upcoming proposals as "Reg Reform 2.0". The *goal* will be enhancement of derivatives markets – their resilience, transparency, soundness, diversity and vibrancy. The *task* will be to better balance the needs of market participants for risk mitigation and market vitality and the needs of Americans for economic growth and prosperity. The *purpose* is the make swaps market reform work as intended and work well. The *direction* will be to go forward with reform, not roll it back.

And, of course, a first step in swaps Reg Reform 2.0 is to introduce a more accurate measure of swaps market size. We have taken that first step today.

Conclusion

In conclusion, the great empirical difference between notional amount and ENNs in the IRS market argues strongly for moving away from notional amount as a metric of market size and risk transfer. By expressing notional amounts in 5-year equivalents and netting longs and shorts between pairs of counterparties within each currency, ENNs capture the market risk transfer in IRS markets much more accurately than outstanding notional amounts. Furthermore, empirical calculations of ENNs reveal that these risk and netting effects are tremendously important: the \$179 trillion of outstanding IRS notional amount for U.S. reporting entities across all currencies collapses to \$15 trillion ENNs - a size that more accurately represents the true relationship of the U.S. IRS market to the global economy.

In a landmark book, titled “The Structure of Scientific Revolutions,”¹¹ Professor Thomas Kuhn said that the success of a paradigm shift can be measured in usage over time. The great empirical difference between notional amount and ENNs in the IRS market makes the case for moving away from the notional amount as a metric of market size and risk transfer toward a more realistic, accurate viewpoint.

Only time will mark a shift in the paradigm of how we measure the size of swaps markets. The alternative is to continue to live with inexactitude, misinterpretation, and inaccuracy.

At one point in his book, Professor Kuhn says that a paradigm shift triumphs over a traditional “mystical”¹² aesthetic. Dr. Tuckman’s analysis is a necessary perspective, achieving much-needed clarity and accuracy.

It is time we all agreed to look ahead with such clarity.

Thank you.

¹ Alan Greenspan, cited in GILLIAN TETT, FOOL’S GOLD 251 (2009).

² PETER J. WALLISON, HIDDEN IN PLAIN SIGHT 74-83 (2015).

³ PETER J. WALLISON, BAD HISTORY, WORSE POLICY 23 (2013).

⁴ ANDREW ROSS SORKIN, TOO BIG TO FAIL 157-159 (2009).

⁵ MERVYN KING, THE END OF ALCHEMY 50 (2016).

⁶ Letter from Jack Kingston, Congressman and Chairman of the House Subcommittee on Agriculture, Rural Development Food and Drug Administration, and Related Agencies, to Gary Gensler, Chairman of the Commodity Futures Trading Commission (June 8, 2012) (on file with the Commodity Futures Trading Commission).

⁷ Law360, October 19, 2017, accessed from www.Law360.com on December 27, 2017. ESMA is the European Securities and Markets Authority.

⁸ BIS Statistical Bulletin, December 2017, p. 252.

⁹ Financial Accounts of the United States, Board of Governors of the Federal Reserve System, Second Quarter 2017.

¹⁰ CFTC Commissioner J. Christopher Giancarlo, *Pro-Reform Reconsideration of the CFTC Swaps Trading Rules: Return to Dodd-Frank*, White Paper, Jan. 29, 2015 (White Paper), <http://www.cftc.gov/idc/groups/public/@newsroom/documents/file/sefwhitepaper012915.pdf>.

¹¹ THOMAS KUHN, THE STRUCTURE OF SCIENTIFIC REVOLUTIONS (1962).

¹² *Id.* at 158.

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