Comments on "Feasibility study on approaches to aggregate OTC derivatives data"

Submitted to

The Financial Stability Board

By

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The FSB distributed for comment the consultation paper, "Feasibility study on approaches to aggregate OTC derivatives data." The primary focus of the consultation paper is three alternative models for an aggregation mechanism: a physically centralized model; a logically centralized model; and the collection and aggregation by authorities themselves of raw data from TRs.

Our primary concern is the ability to work with and analyze the data from the TRs, independent of the proposed mechanisms. At the end of this comment we will directly address the specific question posed in the consultation paper.

Throughout the paper it is implicitly assumed that the target information (for example exposure) is already stored in the TR data, just waiting to be aggregated. However, this assumption is not necessarily correct. The experience of the US CFTC in trying to work with the data in the swaps Trade Repositories (TRs) created by the Dodd-Frank Act (DFA) is emblematic of the problems with the data. Implementation of the TR requirement preceded the creation of a standard for reporting the data. Almost four years after the passage of the legislation, the CFTC has publically revealed that while a lot of data has been reported to the TRs, the CFTC cannot use it as the input for analysis. The CFTC's Technical Advisory Committee held a public meeting on February 10 that focused on data problems. At that meeting the CFTC Chief Economist reported that the data are all over the place and the CFTC cannot work with the TR data: they cannot unravel trades to analyze notional amounts, they cannot look at entity roles, and they cannot compute the cash flows.

The experience of the CFTC with the TR data should serve as a cautionary tale for the FSB. This is especially true given that the Consultation Paper lays out significant analytical requirements for the data: the FSB requested further study of how "...to ensure that the data reported to the TRs can be effectively used by authorities, including to identify and mitigate systemic risk." The paper points to identifying different measures of exposure, such as market values as a precondition to systemic risk analysis.

¹ For example on page 17: "... for instance, to measure total exposure in a given reference entity, or to value the trades for any analyses where market values, rather than notional amounts, are aggregated and where the TR does not collect those market values".

This requirement leads to the core problem: the challenge of what is to be aggregated is not explored in the consultation paper. The likely options are the notional and the market values. Notional value is a likely candidate because it is almost certainly included in the data collected by a TR and it does not need any special computation. Observed market values similarly need no special calculation and might also be included in a TR's reported data. However, observed market values are limited to traded products in liquid markets.

Notional values can be usefully aggregated for some financial products, such as loans and bonds. However, this is not the case for swaps. Notional value gives only limited insight into the risks imbedded in the swaps. Aggregation of market values can be of greater utility, however, observed market values are available for only some swaps. Furthermore, even for those swaps that do have market values, the data become quickly outdated as markets move and, more importantly, market values alone do not support forward looking analysis. If the swaps data system is to support the ability to monitor and mitigate systemic risk, forward looking financial analysis is a precondition. This can only be achieved if the data is reported in a form that enables the generation of state contingent cash flows. State contingent cash flows require the precise modeling of financial obligations, including the links to the credit and market related risk factors.

State contingent cash flows are the starting data for any financial analysis and are additive across all financial instruments. Consistent state contingent cash flows, however, require the standardization of the representation of financial instruments. Consistency and additively are two necessary preconditions for meaningful aggregation. We recommend that the FSB place emphasis on how to standardize the representation of swaps and other financial products in a way that supports analysis and which yields analytical results that can be aggregated. One such approach is being developed by Project ACTUS. It is built around the algorithmic representation of the legal obligations of financial contracts central to cash flow obligations and includes an interface to risk factors. State contingent cash flows that result from the interaction of contract obligations and the state of the risk factors can be precisely computed.

From a broader perspective, emphasis should also be given to the consistent modeling of derivatives, their underlying instruments and all on balance sheet products. This is necessary because the ultimate goal is a capability of monitoring threats to financial stability, which includes all instruments ranging from saving accounts to exotic options.

The ACTUS approach defines the data needed for such an approach. It includes the data mentioned in the paper. However, it is also essential to include the terms of the master agreements and detailed information about the underlying instruments of derivatives because all of these factors are part of the contractual obligations that lead to the state contingent cash flows. The concept of the UPI presented in the consultation paper is extremely important and corresponds to the concept of "Contract Types" within ACTUS. However, ACTUS expands the value of a UPI by adding the capability of generating state

contingent cash flow. Furthermore, the starting point for this approach must be at the individual transaction level².

Coming back to the original question regarding the three models, from an analytics perspective it does not matter which architecture is chosen as long as the data standard itself starts with individual transaction level data that can generate state contingent cash flows. The choice could be based on responding to the sensitivities of the multiple jurisdictions from around the world who participate in collecting and using the data. This approach would lead to the least centralized option. If the preference is to minimize disruptions to institutions and market, the "Upstream" model would be the preferred alternative. This approach permits each participant to continue to use its legacy systems and processes. However, this conclusion is predicated on the ability to map the existing data systems to the data standard that permits the generation of state contingent cash flows and the related forward looking financial analysis.

² Appendix 3 of the FSB paper provides the rational for why individual transaction level data are needed. Most of the types of analysis mentioned in the appendix require this type of data. However, requiring transaction level data would still be justified if only one important analytical use required it.