Electronic Submission

July 12, 2016

Brent J. Fields, Secretary
U.S. Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549-1090

Re: Joint Industry Plan; Notice of Filing of the National Market System Plan Governing the Consolidated Audit Trail
Release No. 34-77724
File No. 4-698

We are providing feedback on the inclusion of primary market transactions on the Consolidated Audit Trail (CAT). The undersigned represent a number of prominent academics who conduct research in the area of securities offerings. Overall, we support the reporting of both top-account and sub-account allocations of primary offerings to the CAT and justify our recommendation with a discussion of the costs and benefits below.[1]

For public companies, capital formation is conducted in the primary market using both registered and unregistered offerings. (For the purposes of this letter, we will restrict our comments to registered equity offerings.) Given the importance of promoting efficient capital formation in the economy, we believe that including primary market transactions as part of the CAT would be beneficial for regulators to better understand the economics of the offering process.

Research has shown that both initial public offerings (IPOs) and follow-ons are sold at substantial discounts to market prices. The average underpricing from the offer price to the first day closing price in initial public offerings from 2001 to 2015 is approximately 13%. If the IPOs were sold at the first closing market price rather than the actual offer price, issuers would have raised $53 billion more that could be used for investment.[2] Over the period of 1990 to 2013, Autore and DeLisle (2016) document that issuers in follow-on offers have offer prices that are an average 2.2% discount from the issuing firm's previous day's closing transaction price.[3] (These discounts to the offer price do not include other fees such as underwriting, legal or accounting fees.)

[1] The definitions of top-account and sub-account are as follows from the proposing release: Top-account allocations refer to allocations during the book-building process to institutional clients and retail broker-dealers. Top-account institutions and broker-dealers make the subsequent sub-account allocations to the actual accounts receiving the shares. An example of a top-account allocation is an allocation to Fidelity Investments, and Fidelity Investments would then allocate the shares to various sub-accounts, such as the Fidelity Small Cap Growth Fund (FCPGX) and the Fidelity Select Biotechnology Portfolio (FBIOX).

[2] See Jay Ritter's website https://site.warrington.ufl.edu/ritter/ipo-data/. Not all of these incremental proceeds would accrue to the issuing firm because of the costs of issuance such as underwriter fees. Furthermore, some shares are being sold by existing shareholders. On the other hand, the $53 billion does not include the exercise of overallotment shares, which would increase this number.

[3] Autore, Don and Jared DeLisle, 2016, Skewness Preference and Seasoned Equity Offers, *Review of Corporate Finance Studies*, forthcoming.

An open question exists as to whether the perceived benefits of underpricing outweigh its costs.[4] The inclusion of primary market transactions in the CAT will provide regulators and if possible, other researchers with the ability to answer this question and to formulate an appropriate response that can make capital formation more efficient.

Theoretical papers have argued that discretionary allocation in bookbuilding can promote price efficiency.[5] Opaqueness in the allocation strategy used by investment banks, however, has allowed questionable underwriter practices including but not limited to "spinning,"[6] "laddering,"[7] and "quid pro quo"[8] arrangements to occur. These abuses harm the ability of firms to raise capital at advantageous prices and therefore, increase the cost of capital to those firms.

Thus, requiring disclosure of allocations in the primary market to the CAT will provide regulators and other researchers with the ability to determine whether the current mechanism of discretionary allocation employed by underwriters benefits or penalizes issuers. Such information can be used to show how strongly allocations correlate with a) buy-and-hold investing, b) soft dollars paid to underwriters, and c) other possible side payments.

Underwriters have long resisted providing information about allocations and the determinants of allocations. We surmise that this is due to the fact that underwriters have two sources of revenue from securities offerings. The first source is the direct compensation or gross spread, which the SEC requires to be disclosed. Secondly, underwriters may also increase their compensation indirectly by using underpriced securities as a form of "currency" to reward valued institutional clients who generate additional revenue by paying, for example, soft dollars (i.e., the dollar value of commissions in excess of direct execution costs). This additional, indirect compensation creates a conflict of interest between what is best for the issuer and what is best for the underwriter. For a given percentage gross spread, both the underwriter and issuer gain from a higher offer price. But if underwriters benefit from a lower offer price due to receiving indirect compensation from buy-side clients, their interests may diverge. Therefore, the underwriter has an incentive to recommend a lower issue price to make shares in the offering more valuable to investors who provide soft dollars. The lower proceeds received by issuers increases their cost of capital when stocks, bonds, or other securities are sold, resulting in less investment and lower job creation.

For example, Credit Suisse and other underwriters shared profits from trading in underpriced IPOs with hedge funds and others during the internet bubble period, as discussed in

[4]See the letter to the Securities and Exchange Commission from Representative Darrell Issa (http://s3.documentcloud.org/documents/370607/issa-ipoletter-june2012.pdf) and the response from Chair Mary Schapiro (https://www.sec.gov/news/press/schapiro-issa-letter-040611.pdf).

[5] Benveniste, Lawrence and Paul Spindt, 1989, How Investment Bankers Determine the Offer Price and Allocation of New Issues, *Journal of Financial Economics* 24, 343-362; Benveniste, Lawrence and William J. Wilhelm, 1990, A Comparative Analysis of IPO Proceeds Under Alternative Regulatory Environments, *Journal of Financial Economics* 28, 173-207; Spatt, Chester, and Sanjay Srivastava, 1991, Preplay Communication, Participation Restrictions and Efficiency in Initial Public Offerings, *Review of Financial Studies* 4, 709–26; and Sherman, Ann and Sheridan Titman, 2002, Building the IPO Order Book: Underpricing and Participation Limits with Costly Information, *Journal of Financial Economics* 65, 3-29.

[6] Liu, Xiaoding and Jay R. Ritter, 2010, The Economic Consequences of IPO Spinning, *Review of Financial Studies* 23, 20242059.

[7] Hao, Qing (Grace), 2007, Laddering in Initial Public Offerings, *Journal of Financial Economics* 85, 102-122.

[8] Reuter, Jonathan, Are IPO Allocations for Sale? *Journal of Finance* 61, 2289-2324 and Jenkinson, Tim, Howard Jones and Feliz Suntheim, Quid Pro Quo? What Factors Influence IPO Allocations to Investors?, Oxford University working paper.

https://www.sec.gov/litigation/complaints/complr17327.htm. We are not suggesting, however, that all underwriters allocate securities the same way or are using the allocation of underpriced shares inappropriately. By providing information on primary market allocations to the CAT, it will be possible for regulators to identify underwriters that may use soft dollar revenue or other profit sharing arrangements to determine allocation decisions. An additional benefit to requiring the disclosure of primary market allocations is that it may reduce behaviors that benefit underwriters at the expense of issuers.

In addition, investors in follow-on offers have attempted to take advantage of the decline in price in the period leading up to the offer by short selling or trading options in violation of Rule 105 (https://www.sec.gov/news/pressrelease/2015-239.html). Research suggests that Rule 105 constrains some but not all manipulative short selling in advance of the offer.[9] Requiring primary market allocations to be reported to the CAT can aid regulators in monitoring and identifying potential manipulation and/or violations of Rule 105 in follow-on offers.

Furthermore, such data can be used to identify potentially manipulative activities outside the offering process. For example, it could be used to determine whether a fund family is attempting to boost the return of a mutual fund by disproportionately allocating underpriced IPOs to the fund.

Although much is known about the pricing of new issues, both initial public offerings and follow-ons, there has been little research on the allocation of shares using information directly obtained from underwriters.[10] In order to overcome this limitation, for example, a number of studies have used data from Form 13F as an imperfect proxy for allocation data.[11] However, Form 13F data cannot fully capture primary market allocations for at least two reasons. First, the requirement to file Form 13F is limited to institutional investment managers with investment discretion over $100 million or more in Section 13(f) securities. Thus, smaller institutions (including some hedge funds) and retail customers are excluded. Second, secondary market transactions may be conducted from the time of the initial allocation to the filing of the form. These transactions could change the

[9] Henry, Tyler and Jennifer Koski, 2010, Short Selling Around Seasoned Equity Offerings, *Review of Financial Studies* 23, 4389-4418.

[10] There a few exceptions to this. Cornelli, Francesca and David Goldreich, 2001, Bookbuilding and Strategic Allocation, *Journal of Finance* 56(6), 2337-2369 have book building data from one European underwriter for 39 equity issues and Jenkinson, Tim and Howard Jones, 2004, Bids and Allocations in European IPO Bookbuilding, *Journal of Finance* 59, 2309-2338 has 27 allocation books for a different European bank. Other studies have aggregate allocation data between retail and institutional investors. Hanley, Kathleen Weiss and William Wilhelm, Evidence on the Strategic Allocation of Initial Public Offerings, 1995, *Journal of Financial Economics* 37, 239-257 (one investment bank for 38 IPOs), Aggarwal, Reena, Nagpurnanand R. Prabhala and Manju Puri, 2002, Institutional Allocation in Initial Public Offerings: Empirical Evidence, *Journal of Finance* 57, 1421-1442 (9 investment banks for 174 IPOs) and Ljungqvist, Alexander and William J. Wilhelm, Jr., 2002, IPO Allocations: Discriminatory or Discretionary?, *Journal of Financial Economics* 65, 167-201 (data from issuers, exchanges, public records and investment bankers in 15 countries for 1,263 IPOs). Chemmanur, Thomas, Shan He and Gang Hu, 2009, The Role of Institutional Investors in Seasoned Equity Offerings, *Journal of Financial Economics* 94, 384-411 infer allocations in 1,108 follow-on offerings using institutional transactions data from Abel/Noser Corporation.

[11] See Reuter, Jonathan, 2006, Are IPO Allocations for Sale? *Journal of Finance* 61, 2289-2324. Ritter, Jay and Donghang Zhang, 2007, Affiliated Mutual Funds and the Allocation of Initial Public Offerings, *Journal of Financial Economics* 86, 337-368, Chemmanur, Thomas, Gang Hu and Jiekun Huang, 2010, The Role of Institutional Investors in Initial Public Offerings, *Review of Financial Studies* 23, 4496-4540, Johnson, William and Jennifer Marietta-Westberg, 2009, Universal Banking, Asset Management and Stock Underwriting, *European Financial Management* 15, 703-732 and Gibson, Scott, Assem Safieddine, and Ramana Sonti, 2004, Smart Investments By Smart Money: Evidence from Seasoned Equity Offerings, *Journal of Financial Economics* 72, 581-604.

amount of shares held upward or downward depending on the trade direction, thereby biasing the inference as to allocations.

Given the potential benefits of requiring this information, we support the reporting of primary market transactions to the CAT at both the top-account and sub-account allocation level. Because concern has been raised by others regarding the stability of top-account allocations (or indications of interest) prior to the effective date, we believe that reporting the final top-account and any associated subsequent sub-account allocations by the top-account holder should be sufficient. We disagree with the statement that many of the potential benefits we have outlined above "could be achieved through the gathering of information relating to sub-account allocations rather than top-account information (Proposing Release, Appendix C, page 39)." Because lead underwriters are responsible for the top-account allocation, some of the abuses noted previously only may be present in these allocations.

As part of our recommendation, we should make clear the distinction between allocation and indications of interest in the shares of the offering. We understand that the process for a book-built offering proceeds in three stages: 1) preliminary indications of interest including bid prices if available, 2) final top-account allocation, and 3) subsequent sub-account allocation. Stage 1 occurs before the effective date and may have a number of different indications of interest from investors as new information on the pricing of the offer becomes available. These iterations are considered part of the bookbuilding process and would not be included in our recommendation for information to be included in the CAT. Because investors may change their indications of interest prior to the effective date and bookbuilding does not follow a standardized process, we believe that supplying this information may be costly.

Stages 2 and 3 occur after the offer is effective and information from these allocations should be reported to the CAT. Some commenters in 2013 provided estimates regarding the cost of providing final allocations at the top-account level. These estimates seem excessively high to us, and we disagree with the claim in Appendix C, page 37, that "the reporting of so-called "top account" information in Primary Market Transactions to the Central Repository would involve significantly more costs which, when balanced against the marginal benefit, is not justified at this time." SIFMA suggests that a systems build-out for final allocation (which we would consider top-account allocations) would be required to provide top-account information as this information is not linked to systems that provide secondary market data.[12] The FIF estimate argues that it will cost each broker-dealer approximately $704,200 to provide initial allocation information for a total of $176 million.[13]

Although we are not investment bankers, we believe that manually entering top-account allocation information into the CAT (if available) should cost substantially less than estimated, even if no electronic transmission platform develops. (As we note below, manual entry could be feasible because pre-trading allocations will not require a time stamp.) Because the data on allocations is not readily available, we are not privy to the average number of investors that receive initial allocations. However, academic research has found that, on average, approximately 260 investors

[12] Letter dated 06/11/2013 available at http://www.catnmsplan.com/industryfeedback/index.html)

[13] This is the difference between the cost estimates of Option 1 (Initial and Sub-Account Allocations) and Option 2 (Sub-Account Allocations only) x 250 broker-dealers from the letter dated 02/17/15 available at http://www.catnmsplan.com/industryfeedback/index.html.

bid (from the proposing release) during the bookbuilding process for IPOs.[14] Even if we make the extreme assumption that everyone who bids is allocated shares, and only one bookrunner per IPO and not all 250 possible broker-dealers enters the top-account allocation information, we suggest it should take no more than 2 person days to manually enter this information into the CAT.[15] If there are 360 offerings[16] per year, (and assuming the number of allocations are similar for follow-ons as for IPOs) and using the per person FTE cost per day of $1200 from the FIF comment letter, then the total cost for all offerings will be 2 person days×$1200×360, or $864,000, significantly less than the $176 million estimated by FIF. To put this number in perspective, operating company IPOs in 2015 alone raised almost $22 billion, not including overallotment options, and paid a proceeds-weighted average gross spread of 5.9% (https://site.warrington.ufl.edu/ritter/ipo-data/). Thus, investment bankers were paid more than $1.29 billion in underwriting fees over this time period. Thus, we argue that the cost of $2,400 per offering for providing top-account allocation information is *de minimis* with respect to the overall cost of issuance.

We also argue that the cost of $58.7 million estimated by FIF to provide sub-account allocation is also overstated. SIFMA notes in its comment letter that

> Information about the final execution of primary market transactions into customer accounts, which ultimately feeds the confirmation, clearance and settlement systems of the various firms, however, should currently be available in the books and records of the firms. In fact, this information is generally available for reporting to the Electronic Blue Sheets ("EBS") system. As SIFMA believes that EBS should be decommissioned and replaced by the CAT once the CAT is operational, we support the CAT's expansion to include final allocations of NMS securities in primary market transactions as part of an overall scheme to supplant EBS with the CAT and retire EBS.

If reporting to the CAT would replace the Electronic Blue Sheets, then the incremental cost of providing sub-account allocation information should also be *de minimis* once the reporting system is in place.

Despite our recommendation that the CAT need not record information on pre-offer changes in tentative allocations, we encourage the Commission and the self-regulatory organizations (SROs) to require that preliminary bookbuilding indications of interest over the entire offering period, including number of shares, bid prices and final allocation (both top- and sub-account), be made

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[14] We use the proposing release number in footnote 1313 of 260 bids obtained from a Commission analysis of 11 IPOs using data from Jay R. Ritter and Donghang Zhang, 2007, Affiliated Mutual Funds and the Allocation of Initial Public Offerings, *Journal of Financial Economics* 86, 337-368 (http://bear.warrington.ufl.edu/ritter/Allocation08282012.xls). As a check on this estimate, Cornelli, Francesca and David Goldreich, 2001, Bookbuilding and Strategic Allocation, *Journal of Finance* 56(6), 2337-2369 document an average of 295 bids using data from one European underwriter for 39 equity issues and Jenkinson, Tim, Howard Jones and Feliz Suntheim, Quid Pro Quo? What Factors Influence IPO Allocations to Investors?, Oxford University working paper (http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2785642) find an average of 140 bids in 220 IPOs using data gathered by the UK Financial Conduct Authority.

[15] We agree with the proposing release that not all broker-dealers would need to enter this information. Even if everyone in the lead syndicate entered top-account allocations, there would still be only 260 observations, in total, to be reported.

[16] From the proposing release: 120 IPOs and 240 follow-ons.

available in an easily accessible format for both regulators and academics outside of the CAT. An alternate reporting scheme that better balances the costs of producing this information but does not diminish its usefulness should be considered. Such information is crucial to our understanding of the capital formation process and for designing efficient regulations that address the mandate of the S.E.C. to facilitate efficient capital raising without compromising investor protection.

Although the proposal focuses on equity offerings, we support the inclusion of primary market allocations for all registered offerings whether or not they use bookbuilding. In addition, we recommend the inclusion of primary market allocations of offerings of non-NMS securities, such as debt, should the final implementation of the CAT include such securities.

We do not believe that time stamps on primary transactions need to be as granular as milliseconds. We suggest that an indicator variable be used as to indicate whether shares were allocated to an account prior to the opening of trading. Time stamps should be used if shares are allocated after trade opens.

Finally, we recommend the addition of two financial economists (preferably academic) with expertise in both econometrics and the economics of the primary market and market microstructure to the Advisory Committee if they are not already included. The CAT is likely to involve big data, and economists can provide guidance to the Advisory Committee as to how the data is likely to be used either in rulemaking and/or enforcement as well as the most efficient way to structure the data.

If you have any questions regarding our submission, please contact Kathleen Weiss Hanley or Jay Ritter by email or phone.

Very truly yours,

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