

Via Electronic Submission

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October 21, 2024

Re: Proposed Rule: Financial Data Transparency Act Joint Data Standards Rulemaking (August 2, 2024)

OCC Docket ID OCC-2024-0012

FRB Docket No. R-1837; RIN 7100-AG-79

FDIC RIN 3064-AF96

NCUA 3133-AF57: Docket Number NCUA-2023-0019

CFPB Docket No. CFPB-2024-0034; RIN 3170-AB20

FHFA RIN 2590-AB38

CFTC RIN number 3038-AF43

SEC File No. S7-2024-05

Treasury RIN [1505-AC86]

The American Bankers Association ("ABA")¹ appreciates the opportunity to comment on the proposal² by nine federal agencies ("Agencies")³ to establish joint data standards for collections of information reported to the Agencies under Section 124 of the Financial Stability Act of 2010, which has been added pursuant to Section 5811 of the Financial Data Transparency Act of 2022 ("FDTA").4 The ABA comments in its capacity as owner of the CUSIP financial instrument identification system. Although the ABA supports the FDTA's goals of financial reporting transparency and efficiency, the ABA respectfully urges the Agencies to reconsider the proposed establishment of Bloomberg L.P.'s ("Bloomberg") Financial Instrument Global Identifier ("FIGI") as the exclusive common financial instruments identifier for purposes of agency reporting and either issue a revised Notice of Proposed Rulemaking that complies with the Administrative Procedure Act ("APA") or remove such identifier from any final rule.

The Proposed Rule declines to consider the globally relied-upon, fungible Committee on Uniform Security Identification Procedures ("CUSIP") and the closely related International Securities Identification Number ("ISIN") financial instrument identification systems as the common financial instruments identifier, although they have been, and continue to be, the established financial industry and government standards for uniquely identifying financial

The ABA is a trade association for the nation's \$23.9 trillion banking industry, which is composed of small, regional, and large banks that together employ more than 2.1 million people, safeguard \$18.8 trillion in deposits, and extend nearly \$12.5 trillion in loans. The ABA is the owner of all rights to the CUSIP system or other identifier systems developed by CUSIP Global Services ("CGS"), including all rights in and to CGS's various commercial databases and the CGS Data. Learn more at www.aba.com. CGS, the operator of CUSIP, is managed on behalf of the ABA by FactSet Research Systems Inc., with a Board of Trustees that represents the voices of leading financial institutions.

Financial Data Transparency Act Joint Data Standards, 89 Fed. Reg. 67,890 (proposed Aug. 22, 2024) (the "Proposed Rule").

The Agencies include: the Office of the Comptroller of the Currency ("OCC"), the Board of Governors of the Federal Reserve System ("FRB"), the Federal Deposit Insurance Corporation ("FDIC"), the National Credit Union Administration ("NCUA"), the Consumer Financial Protection Bureau ("CFPB"), the Federal Housing Finance Agency ("FHFA"), the Commodity Futures Trading Commission ("CFTC"), the Securities and Exchange Commission ("SEC"), and the Department of the Treasury (the "Treasury").

¹² U.S.C. § 5334(b).

instruments across many functions, including financial reporting. CUSIP's efficiency-enhancing role in the U.S. and global markets has developed over nearly 60 years in close collaboration with market participants to cover a wide range of financial instruments. Importantly, based on a decades-long track record, CUSIPs are the designated means of identifying financial instruments for nearly every financial reporting form collected by the Agencies, as well as the underlying identifier for a myriad of Agency operations including: Treasury issuances; Treasury auctions; mortgage-backed securities ("MBS") issuances by various government-sponsored enterprises; and MBS CUSIP aggregation to name just a few. CUSIP is the relied upon financial instrument identifier by nearly all market participants.

CUSIP's worldwide success is in part a product of its governance: CUSIP is operated by CGS and overseen by an advisory board of trustees, which is made up of 10 executives from major financial institutions and market intermediaries that currently include DTCC, Citigroup, Goldman Sachs, Fidelity Investments, Zircon & Company, Inc., Loan Syndication & Trading Association ("LSTA"), Northern Trust, Loomis Sayles & Company L.P., Zions Bank and JPMorgan Chase & Co.⁵ This advisory board of experienced participants has allowed CGS to exceed market requirements, steadfastly developing CUSIP to adapt to evolving markets and fostering the creation of other international identifiers to ensure the efficiency and interconnectedness of the global capital markets.

Based on a plainly incorrect reading of the FDTA, however, the Agencies determined that CUSIP was ineligible to be used as the common financial instruments identifier, ignoring CUSIP's six decades-long history of efficiently serving the marketplace. By proposing to designate FIGI as the exclusive common financial instruments identifier, the Agencies acted arbitrarily and capriciously under the APA by: (i) overlooking the proven, efficiency-enhancing role of CUSIP in the U.S. and global markets across various functions such as raising capital, trading, clearance, settlement, valuation, reporting, recordkeeping, and monitoring risk; (ii) ignoring the extent to which the fungibility that CUSIP offers is critical for the effective and transparent operation of the markets and financial reporting; (iii) failing to consider adequately or assess the costs and benefits of the Proposed Rule, including failing to map common collections of information to ascertain whether a common identifier was necessary, the costs to market participants to render FIGI useful, the disruptive impact on existing market infrastructure, and that FIGI is not capable of replicating CUSIP; and (iv) ignoring various deficiencies of FIGI, including its dependence on Bloomberg, which undermine the Agencies' choice in the Proposed Rule.

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Leadership Team, CUSIP GLOBAL SERVICES, https://www.cusip.com/about/leadership.html (last visited Oct. 17, 2024).

[&]quot;[T]he legislative history of the APA suggests that '[matters] of great importance, or those where the public submission of facts will be either useful to the agency or a protection to the public, should naturally be accorded more elaborate public procedures." Todd Garvey, Cong. Research. Serv., R41546, A Brief Overview of Rulemaking and Judicial Review 2 (Mar. 27, 2017) (citing Administrative Procedure Act: Legislative History, S. Doc. No. 248, at 259 (1946); Charles H. Koch Jr., 1 Administrative Law and Practice 329-30 (2010 ed.)).

The ABA, as well as many other commenters, submitted a letter to the Agencies on September 3, 2024, requesting a 60-day extension of the Proposed Rule's short comment period.⁷ The ABA noted that an extension was necessary to provide commenters with a reasonable and meaningful opportunity to comment on the impact of the Proposed Rule. The Agencies did not consider extension requests from commenters who represent market participants of all types.⁸ All requestors stated that they needed significantly more time than 60 days to present the Agencies with adequate feedback on the breadth and expected wide-reaching impact of the Proposed Rule, especially because the Proposed Rule did not provide any analysis of the potential economic impact of establishing FIGI as the exclusive common financial instruments identifier. Had the requested 60-day extension been granted, commenters would have been able to conduct a more robust analysis of the economic consequences and seek additional input from key market participants and other stakeholders. This letter builds upon the prior letter submitted by the ABA to the extent feasible given the brevity of the comment period. We also provide a preliminary economic analysis of the Proposed Rule's impact. Had the ABA been afforded a much-needed extension, it would have undertaken a more fulsome analysis of costs and benefits, including by assessing the extent of impacted market participants.

I. Background

A. Creation of CUSIP

The Agencies should consider CUSIP's history, coverage and purpose to understand the role and impact of a financial instruments identifier. CUSIP was created by the ABA in collaboration with market participants and industry groups to develop a more efficient system for the trading, clearing, and settlement of securities in response to the settlement "paperwork crisis." ¹⁰

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See, e.g., Letter to Vanessa A. Countryman, Secretary, SEC, from Thomas Pinder, General Counsel, ABA (Sept. 3, 2024), at 1-2, https://www.sec.gov/comments/s7-2024-05/s7202405-515015-1487362.pdf ("ABA Extension Letter").

See, e.g., Letter to Ann E. Misback, Secretary, FRB, et al. from 11 trade associations (Oct. 8, 2024), https://www.sec.gov/comments/s7-2024-05/s7202405-527575-1515582.pdf; Letter to OCC from Gail Bernstein, General Counsel and Head of Public Policy, et al., Investment Adviser Association (Oct. 7, 2024), https://www.sec.gov/comments/s7-2024-05/s7202405-527336-1514722.pdf; Letter to Vanessa Countryman, Secretary, SEC, from Jessica R. Giroux, General Counsel & Head of Fixed Income Policy, American Securities Association (Sept. 27, 2024), https://www.sec.gov/comments/s7-2024-05/s7202405-526535-1510682.pdf. (Oct. 2, 2024), https://www.sec.gov/comments/s7-2024-05/s7202405-526535-1510682.pdf.

See CRAIG M. LEWIS, PH.D., FINANCIAL DATA TRANSPARENCY ACT JOINT DATA STANDARDS PROPOSED RULEMAKING (Oct. 21, 2024) (attached hereto as <u>Exhibit 1</u>) [hereinafter, the "<u>Preliminary Economic Analysis</u>"] (providing a preliminary analysis of the implications of using FIGI as a standard identifier for purposes of regulatory reporting); CRAIG M. LEWIS, PH.D., ANALYSIS OF VOLUNTARILY REPORTED FINANCIAL INSTRUMENT GLOBAL IDENTIFIERS (FIGIS) IN SEC FORM 13F FILINGS 3 (Oct. 10, 2024) (attached hereto as <u>Appendix 1</u> to <u>Exhibit 1</u>) [hereinafter, the "<u>13F Analysis</u>"] (providing a preliminary analysis of the institutional managers that report optional FIGIs on Form 13F); see also infra note 115 and accompanying text.

Faced with rising trading volumes and the seismic shift in the American capital markets toward institutional investors in the late 1960s and early 1970s, the back-offices of Wall Street brokers struggled to stay afloat of the tsunami of post-trade processing paperwork. Operational inefficiencies were brought to the surface: with approximately 33 different documents used to execute and record a single securities transaction, clerical errors

In 1964, the New York Clearing House Association, the long-standing banking association whose model effectively inspired the Federal Reserve System, tasked the ABA with creating a system to uniquely identify each current and future security in a manner that was not only uniformly printable, machine-readable and fungible, but also administered by an agency according to the developed specifications. Accordingly, the ABA sponsored the Committee on Uniform Security Identification Procedures to create a standard code that would expedite the identification of securities. This standardization helped alleviate the clerical errors, backlogs, rejections and reprocessing steps that had led to over \$400 million in certificates being lost or stolen in the paperwork crisis. 12

CUSIP's first directory of CUSIP identifiers and their corresponding data was published in 1968. The SEC highlighted CUSIP's pivotal role in resolving the high failure rates of receiving and delivering securities of the 1960s¹³ and described CUSIP as a "necessary pre-condition for the automation of the trade execution and consummation process." With this success, more entities began to integrate CUSIP into their functions. Beginning in 1970, self-regulatory organizations such as the National Association of Securities Dealers ("NASD") and the New York Stock Exchange ("NYSE") included CUSIPs on certificates and clearing or settling documents. In

and backlogs were inevitable and numerous securities and payments went undelivered. *See* Larry E. Bergmann, Sr. Associate Director, Division of Market Regulation, SEC, *The U.S. View of the Role of Regulation in Market Efficiency*, SEC (Feb. 10, 2004), https://www.sec.gov/news/speech/spch021004leb.htm; William F. Jaenike, *The Paperwork Crisis*, OPTIMIZERONLINE (Aug. 19, 2008), https://optimizeronline.com/the-paperwork-crisis/.

Frank Moore, CUSIP Numbers: How a Well-Established Market Tool May Contribute to Improving Continuing Disclosure, 21 DEBT LINE OFF PRINTS: CALIFORNIA DEBT AND INVESTMENT ADVISORY COMMISSION No. 5, at 1 (May 2002), https://www.treasurer.ca.gov/cdiac/debtpubs/2002/052002cusip.pdf; New York Clearing House Association Records, 1853-2006, COLUMBIA UNIV. LIBRARIES: ARCHIVAL COLLECTIONS, https://findingaids.library.columbia.edu/ead/nnc-rb/ldpd 7094252#history (last visited Oct. 14, 2024).

Alice Gomstyn, How a Blizzard of Paperwork Paralyzed Wall Street in the 1960s, BUSINESSINSIDER (Oct. 19, 2015), https://www.businessinsider.com/wall-street-paperwork-crisis-in-1960s-2015-10?IR=T; see also Richard Halloran, Securities Thefts Put at \$500-Million, N.Y. TIMES (June 9, 1971) (U.S. Attorney General John N. Mitchell's "conservative estimate" of the value of securities stolen in 1969 and 1970 was \$500 million); Transformation & Regulation: Equities Market Structure, 1934 to 2018, SEC HISTORICAL SOCIETY (June 2, 2004), https://www.sechistorical.org/museum/galleries/msr/msr02b_institutional_investors.php ("By one estimate, some \$100 to \$400 million was stolen from investors between 1964 and 1969").

See Remarks of Hamer H. Budge, Chairman, Securities and Exchange Commission, Upon Receiving First Copy of the CUSIP Directory (June 20, 1969), https://www.sec.gov/news/speech/1969/062069budge.pdf ("The CUSIP system represents the foundation of the program to improve the speed and accuracy in the processing of securities and transactions involving them. We urge you to build upon that foundation as quickly as possible and again congratulate all of the organizations and individuals who participated in the development of the CUSIP system for their noteworthy achievement.").

See Sec. Exch. Comm'n, Study of Unsafe and Unsound Practices of Brokers and Dealers, H.R. Doc No. 92-231 (1971), at 3, 35 [hereinafter, "BD Study"].

All exchanges, the NASD, the bank clearing houses, the Municipal Finance Officers Association, the Corporate Secretaries Society and the Treasury Department all required certificates delivered by banknote companies to include CUSIP identifiers by October 1, 1970. Jaenike, *supra* note 10. After January 1, 1971, every stock certificate issued by an issuer listed on NYSE or the American Stock Exchange had to feature the CUSIP identifier, and by April 1972, the clearing corporations of the New York, American, Boston, Midwest, Pacific Coast and Philadelphia-Baltimore-Washington Stock Exchanges and the National Clearing Corporation of the

1975, the Federal Reserve began using CUSIP identifiers to speed up transfer of U.S. Treasury issues. In 1983, the Municipal Securities Rulemaking Board embraced CUSIP for municipal bonds. The National Association of Insurance Commissioners ("NAIC"), which sets standards for state insurance commissioners, integrated CUSIP into "price grids" – CUSIP-specific matrices with price breakpoints used in reporting MBSs. 17

Over the decades, CUSIP's role in, and importance to, the U.S. and global markets continued to grow. Since 1976 and to date, CUSIP has been recognized as an American National Standard. And since 1986, CUSIP has been integral to the interconnected global markets through ISIN because CUSIP is the national identifier used in ISIN for over 30 countries, including the United States and Canada. More than 200 jurisdictions worldwide and approximately 120 global stock exchanges, securities depositories and national numbering agencies, rely on and support the ISIN as the single cross-border International Organization for Standardization ("ISO") instrument identification standard. Foreign reporting requirements, such as those under MiFID, also require ISIN.

NASD would only accept or issue clearing or settling documents with a CUSIP identifier. *See* BD Study, *supra* note 14, at 35.

VIRGINIA B. MORRIS & KENNETH M. MORRIS, CUSIP: A COMMON LANGUAGE FOR EFFICIENT MARKETS, CUSIP, at 5 (2022), https://www.cusip.com/pdf/news/CUSIP-ACommonLanguageForEfficientMarkets 2022.pdf.

[&]quot;Price Grids" created as part of the financial modeling methodology for RMBS and CMBS under the NAIC are **CUSIP** specific. Reporting—Reporting See Structured Securities Instructions, https://content.naic.org/structured securities/structured securities reporting instructions.htm (last visited Oct. 14, 2024); Charles A. Therriault, NAIC Securities Valuation Office (SVO) & Eric Kolchinsky, NAIC Structured Securities Group (SSG) and Capital Markets Bureau, Memorandum re: Proposed Amendment to the Purposes and Procedures Manual of the NAIC Investment Analysis Office (P&P Manual) to Update the Financial Modeling Instructions for RMBS/CMBS Securities and Direct IAO Staff to Produce NAIC Designation and NAIC Designations Categories for Non-Legacy Securities, **NAIC** (Feb. 2021), https://content.naic.org/sites/default/files/inline-files/2021-027.01%20-%20Amend%20PP%20Part%20Four%20Price%20Grids%20%28v4%29.pdf.

American National Standards are voluntary standards developed through an inclusive process permitting the participation of voluntary consensus bodies comprised of thousands of individuals, companies and government agencies, among others, and overseen by the neutral entity the American National Standard Institute ("ANSI"). American National Standards (ANS) Introduction, ANSI, https://www.ansi.org/american-national-standards/ansintroduction/overview (last visited Oct. 15, 2024). The predecessor to the Accredited Standards Committee X9 Inc. ("ASC X9"), a nonprofit accredited by ANSI and tasked with creating international standards for the financial services industry, first recognized CUSIP in 1976 and has since reapproved CUSIP. See CUSIP Re Approved as U.S. Standard for Securities Identification, Building on 50 Years of Support for Transparent and Efficient (Feb. Markets. 3, 2021) **Thereinafter** "CUSIP Re Approved"], https://x9.org/wpcontent/uploads/2021/02/ABA-X9-CUSIP-Release-Final.pdf.

¹⁹ CGS ISIN Service, CUSIP GLOBAL SERVICES, <u>https://www.isin.cusip.com/isin/login.html</u> (last visited Oct. 14, 2024).

ISO 6166:2021, Financial Services – ISIN; see also CUSIP Re Approved, supra note 18; Country Codes, ISIN, https://www.isin.net/country-codes/ (last visited Oct. 14, 2024).

EUR. SEC. AND MKTS. AUTH., TECHNICAL REPORTING INSTRUCTIONS: MIFIR TRANSACTION REPORTING (July 17, 2017) [hereinafter, "MiFIR Reporting Instructions"], 2016-1521 mifir transaction reporting technical reporting instructions.pdf (europa.eu); Article 3, Commission

The Agencies proposed to establish the ISO 17442-1:2020, Financial Services—Legal Entity Identifier ("<u>LEI</u>") as the common legal entity identifier. The ISIN maps to the LEI. Over 1.4 million issuer LEIs are now linked to active U.S. ISINs.²² This is a result of the collaboration between the Global Legal Entity Identifier Foundation, ("<u>GLEIF</u>") and the Association of National Numbering Agencies ("<u>ANNA</u>"), which is the registration authority for ISIN. Due to the linkage between CUSIP and ISIN and the mapping between LEI and ISIN, the mapping for CUSIPs to LEIs already exists.

The CUSIP identifier's integration into the market and regulatory ecosystem was not due to its inclusion into regulations. On the contrary, regulators, including the Agencies, started mandating CUSIP into forms and regulations because it had already demonstrated its value, reliability and use-case. CUSIP is the common identifier by which market participants dialogue to efficiently clear, settle and record transactions. In the Proposed Rule, the Agencies ignore these decades of history and CUSIP's proven role and record in the market.

B. A Common Identifier

Each CUSIP uniquely identifies a specific financial instrument and the issuer of that instrument. It consists of nine characters, ²³ either all numbers or a combination of numbers and letters, that concisely represent a myriad of data points that together define the financial instrument being identified. A security that is assigned a CUSIP is automatically assigned its corresponding ISIN allowing for immediate integration into the global market network. As noted above, the ISIN maps to the LEI furthering the interoperability of financial data. ²⁴ The issuance cost of a CUSIP identifier is a one-time cost payable by the requester and is on a cost recovery basis. ²⁵

Delegated Regulation (EU) 2017/585 of July 14, 2016, https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017R0585&from=EN.

Matthew Bastian & Gerard M. Faulkner, CUSIP and LEI: Two Standards, One Stop, S&P GLOBAL MARKET INTELLIGENCE, at 5 (2020), https://www.spglobal.com/marketintelligence/en/documents/cusip-lei-two-standards-one-stop-transcript.pdf.

The first six characters identify the issuer, the next two characters the issue and the final character is a check digit.

The ISIN code consists of a total of 12 characters where the first two characters are the alpha-2 country code as issued in accordance with the international standard ISO 3166 of the country where the issuer of securities, other than debt securities, is legally registered or in which it has legal domicile. For debt securities, the relevant country is the one of the ISIN-allocating National Numbering Agency. In the case of depository receipts, such as ADRs, the country code is that of the organization that issued the receipt, rather than instead of the one that issued the underlying security. The next nine characters are taken up by the local numbering code of the security concerned. The final character is a check digit computed according to a specified formula. *Identifiers*, ANNA, https://annaweb.org/identifiers/ (last visited Oct. 14, 2024). For example, the European Securities Market Authority ("ESMA") has adopted ISIN as the sole identification standard for regulatory reporting such as for MiFiDII/MiFIR and MAR. Article 3, Commission Delegated Regulation (EU) 2017/585 of July 14, 2016, https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017R0585&from=EN.

See, e.g., Fees for CUSIP Assignment, CUSIP GLOBAL SERVICES, www.cusip.com/pdf/FeesforCUSIPAssignment.pdf (last visited Oct. 14, 2024) (providing a fee schedule for CUSIP assignment ranging from \$32-\$206 depending on asset class and whether there is an offering with multiple classes); see also CUSIP Global Services Frequently Asked Questions, CUSIP GLOBAL SERVICES, at 6, https://www.cusip.com/pdf/FAQs CUSIP 4 21 14 FINAL.pdf (last visited Oct. 14, 2024). This pricing

As new types of instruments were introduced in the market, CUSIP expanded to cover them. This includes mutual funds, syndicated loans, equity options, hedge funds, and more recently, private placements.²⁶ When expanding CUSIP coverage, CGS works diligently with subject matter experts to ensure accuracy. For example, in the case of syndicated loans, CGS partnered with the Loan Syndication and Trade Association.²⁷ And in the case of certain commodities, CGS worked with the Delaware Depository.²⁸

Throughout its history of CUSIP administration, CGS has focused on simple principles that have enabled CUSIP to adapt and evolve with the market: simplicity, flexibility, efficiency, and extensibility.²⁹ That is why CUSIP identifiers are fungible (each financial instrument has exactly one CUSIP identifier), machine-readable, and adaptable to internal processing, communications and document systems. That is also why in 1988, CGS developed CINS, the CUSIP International Numbering System, to meet market need for a CUSIP identifier for securities originally issued outside the U.S.³⁰ CUSIP, CINS and ISINs are interoperable and permit seamless mapping to allow market participants to easily cross-reference data, including linking to LEIs.³¹

Accompanying each CUSIP is a detailed description of each instrument ("CGS reference data"). CUSIPs, ISINs and CINS, and the associated reference data allow for unique identification of each financial instrument. In addition, CGS provides a number of more specialized data feeds, such as real-time notices of issuances and corporate actions or issues that are covered under the same private placement offering. CGS license fees are based on the type of access and needs of the customer. Customers can receive CUSIP identifiers and CGS reference data either directly or indirectly through an authorized vendor. As an initial matter, over 33% of all CUSIP data customers do not pay anything for the data. CGS reference data is free, for example, if the customer needs data for 500 CUSIPs or less, it is free for academic and teaching purposes or for regulatory reporting use only, and it is free for customers who access CGS reference data in a read-

mechanism is similar to the cost of obtaining an LEI. There is a registration fee for an LEI identifier, which is also on a cost recovery basis. *Briefing: Legal Entity Identifier (LEI)*, ESMA, at 3 (Oct. 14, 2017), https://www.esma.europa.eu/sites/default/files/library/esma70-145-238_lei_briefing_note.pdf. *See, e.g., LEI Number Prices*, LEI SERVICE, https://leiservice.com/pricing-us (last accessed Oct. 14, 2024); *Prices*, AMERICAN LEI, https://www.lei-lookup.com/lei-cost/ (last accessed Oct. 14, 2024).

MORRIS, *supra* note 16, at 11.

²⁷ *Id*.

²⁸ *Id*.

²⁹ *Id.* at 6.

³⁰ Id. at 7. CINS and CUSIP are identical except that the first character in CINS is a letter for the country or region where the security is registered.

³¹ Id. at 15; Bastian & Faulkner, supra note 22, at 5. One element not embedded in the ISIN (or CUSIP) identifiers themselves is the exchange where the security is traded. That is an important element because pricing can vary depending on trading venue. The exclusion is purposeful to promote fungibility across markets to promote interoperability and accuracy. Further, that is easily solved for by combining the ISIN with the relevant MIC, the standard four-character code for identifying exchanges and other markets where trades are executed and settled. MORRIS, supra note 16, at 19.

only format on the vendor's display terminals.³² Licensing fees are determined by the usage of the customer and CGS provides a fee estimator on its website.³³

For 60 years, CGS has maintained and developed interlinked common financial instrument identifiers and CGS reference data that have enabled markets to function seamlessly and efficiently.

II. The Proposed Rule Exceeds the Statutory Mandate to the Agencies in the FDTA.

The FDTA instructs the Agencies to establish "data standards" that "include common identifiers for collections of information reported to covered agencies or collected on behalf of the Financial Stability Oversight Council." Such common identifiers shall include a common nonproprietary "legal entity identifier" that is available under an open license for all entities required to report to covered agencies. The text of the FDTA does not mandate that the Agencies include any specific kind of common identifier other than a legal entity identifier. ³⁶

The Agencies have proposed to establish FIGI as the exclusive common financial instruments identifier and declined to consider CUSIP. Despite acknowledging that identifiers like CUSIP and ISIN are more "widely used," the Agencies chose FIGI—and refused to consider CUSIP—solely because CUSIP and ISIN "are proprietary and not available under open license," while FIGI supposedly is not.³⁷ The Agencies misconstrue the statute by imposing a requirement – that all *common identifiers* be nonproprietary *and* available under an open license – that does not exist.³⁸ As the FDTA is drafted, the requirement in Section 5334(c)(1)(A) applies only to legal entity identifiers. A plain reading of the FDTA makes this clear: "data standards . . . shall . . . include common identifiers . . . which shall include a common nonproprietary legal entity

MORRIS, supra note 16, at 11; see also License Fees—Fee Calculator, CUSIP GLOBAL SERVICES, https://www.cusip.com/services/license-fees.html#/licenseStructure (last visited Oct. 14, 2024) [hereinafter, "CUSIP Fee Estimator"]. Additionally, there is a no-fee service that municipal bond issuers can access for disclosure reporting purposes mandated under Rule 15c2-12 of the Exchange Act and an ISIN web-based look-up service that global users of ISIN may access without charge, subject to the terms of use agreement with CGS.

³³ See CUSIP Fee Estimator, supra note 32.

³⁴ 12 U.S.C. § 5334(c)(1)(A).

³⁵ *Id*.

In fact, even after the Proposed Rule, Agencies have issued rules that allowed for choices of identifiers. In a recent Office of Financial Research ("OFR") rulemaking requiring reporting for certain non-centrally cleared bilateral transactions in the U.S. repurchase agreement (repo) market, OFR determined (after the issuance of the Proposed Rule) that specifying a single securities identifier type was not necessary and permitting reporting entities to report CUSIP, FIGI, ISIN and NO IDENTIFIER TYPE. See OFF. FIN. RESEARCH, REPORTING INSTRUCTIONS FOR PREPARATION OF THE REPORT OF NON-CENTRALLY CLEARED BILATERAL TRANSACTIONS IN THE U.S. REPURCHASE AGREEMENT MARKET 8 (Sept. 25, 2024), https://www.financialresearch.gov/data/collections/files/nccbr-reporting-instructions.pdf. OFR provided no rationale for this decision as the final rule release just noted that OFR "will enumerate the choices available for this field in the reporting instructions." See Ongoing Data Collection of Non-Centrally Cleared Bilateral Transactions in the U.S. Repurchase Agreement Market, 89 Fed. Reg. 37091, 37102 (May 6, 2024).

Proposed Rule, *supra* note 2, at 67,897.

³⁸ *Id*.

identifier that is available under an open license"³⁹ This indicates that Congress intended only the legal entity identifier must be nonproprietary and available under an open license. If Congress intended that *all* common identifiers to share the specific attributes of being nonproprietary and available under an open license, the statutory language would not have singled out the legal entity identifier in this manner. ⁴⁰

Section 5334(c)(1)(B) of the FDTA further instructs that, "if practicable," data standards be nonproprietary or made available under open license. This factor is one among six factors, none of which are determinative.⁴¹ The Proposed Rule does not reference the factors in Section 5334(c)(1)(B) when discussing common identifiers other than the common legal entity identifier, and the Agencies do not appear to have relied on Section 5334(c)(1)(B) when deciding to designate FIGI as the exclusive financial instrument identifier. However, to the extent that the six factors in Section 5334(c)(1)(B) are applicable, CUSIP generally meets these factors more so than FIGI, as further discussed below. Importantly, Congress modified the application of these factors by the clause "to the extent practicable." Therefore, the Agencies' use of only one of the six general factors to exclude CUSIP without analyzing all of the proposed common identifiers against all six factors and considering the practicability of those factors is inconsistent with Congressional intent.⁴²

³⁹ 12 U.S.C. § 5334(c)(1)(A) (emphasis added).

This interpretation also is consistent with basic grammar and a proper interpretation of the canon of the last antecedent. Section 5334(c)(1)(A) includes two relevant antecedent nouns, the plural "common identifiers" and the singular "a common . . . legal entity identifier." *First*, the verb preceding "available under an open license" is the singular "is," not the plural "are," indicating the subject of the verb is also singular. Moreover, the adjective "nonproprietary" comes in between the words "common" and "legal entity identifier," meaning it can only be meant to modify the "legal entity identifier," not all "common identifiers." *Second*, the phrase "that is available under an open license" is not separated from the rest of the sentence by a comma. When a list of multiple nouns is not followed by a comma prior to a limiting phrase, the canon of the last antecedent kicks in, and the limiting clause only applies to the immediately preceding term, "common nonproprietary legal entity identifier," rather than all antecedents. *See United States* v. *Paulson*, 68 F.4th 528, 538 (9th Cir. 2023), *cert. denied*, 144 S. Ct. 1029 (2024) (applying the last antecedent rule because "the limiting phrase . . . is not separated from both antecedents by a comma, and it does not follow an integrated clause that contains both antecedents.").

These factors are "to the extent practicable—(i) render data fully searchable and machine-readable; (ii) enable high quality data through schemas, with accompanying metadata documented in machine-readable taxonomy or ontology models, which clearly define the semantic meaning of the data, as defined by the underlying regulatory information collection requirements; (iii) ensure that a data element or data asset that exists to satisfy an underlying regulatory information collection requirement be consistently identified as such in associated machine-readable metadata; (iv) be nonproprietary or made available under an open license; (v) incorporate standards developed and maintained by voluntary consensus standards bodies; and (vi) use, be consistent with, and implement applicable accounting and reporting principles." § 5334(c)(1)(B)(iv).

The Proposed Rule does not analyze the practicability of choosing FIGI as the exclusive identifier for all financial instruments. *See* Proposed Rule, *supra* note 2, at 67,897. Instead, the Proposed Rule notes as rationale for choosing FIGI that FIGI "has been implemented as a U.S. standard (X9.145) by the ANSI Accredited Standards Committee X9 organization." *Id.* CUSIP has been an approved U.S. standard (X9.6) by the ANSI Accredited Standards Committee X9 organization (and its predecessors) since 1976. *See CUSIP Re Approved, supra* note 18. FIGI was only recently adopted by ASC X9 in 2021. Similarly, ISIN is an ISO-approved standard. Both have been approved standards by voluntary consensus standards bodies for far longer than FIGI. *See* discussion, *supra* note 18 and accompanying text.

Moreover, FIGI does not even meet the Agencies' reading of the statue as requiring the common identifier to be nonproprietary and/or available under an open license. As described in detail below in Section III.D, although FIGI is ostensibly available under an open license, users only have access to a narrow set of data and to render this data useful, users would need other feebased data sources with more robust reference data, such as a Bloomberg subscription or another commercial vendor's data feed. Therefore, the Agencies' designation of FIGI as the exclusive common financial instruments identifier at the exclusion of CUSIP on the basis that one is free and the other is not is erroneous.

Further, the FDTA instructs the Agencies to include "common identifiers for collections of information" in their joint data standards to promote data aggregation and interoperability leaving it to the Agencies' discretion so long as such common identifier meets those purposes. The term "common" means "shared by" or "done by more than one." The SEC and CFTC, as market regulators, have already determined which financial instrument identifiers to use in reporting financial data and there is no conflict with the other Agencies as the vast majority of them already use CUSIP. The data with respect to financial instrument identifiers is already interoperable. Establishing FIGI as a new identifier for financial reporting that is different from the one already in use (CUSIP) would not further facilitate data aggregation and promote interoperability, but would rather do just the opposite as a result of not being interoperable with the identifiers already in use. Such a possibility is at odds with the textual mandate of "commonality" under the FDTA.

III. The Proposed Rule's Exclusive Designation of FIGI Is Arbitrary and Capricious Under the APA.

In instructing the Agencies to establish joint data standards, the FDTA left it to the Agencies' discretion to determine what common identifiers besides a legal entity identifier should be included to meet the goals of the FDTA. The Agencies had the choice not to select a common identifier for financial instruments if such selection did not address the goals of the statute. However, when the Agencies affirmatively proposed to select FIGI as the exclusive common financial instruments identifier, they were required to comply with the APA by "examin[ing] the relevant data and articulat[ing] a satisfactory explanation for its action, including a 'rational connection between the facts found and the choice made'" and "consider[ing] an important aspect of the problem." In particular, courts have found that consideration of a regulation's economic impacts and "costs and benefits" are a necessary part of reasoned decision-making. 46

⁴⁴ As reflected in attached <u>Appendix A</u>, all covered collections of information rely on CUSIP.

⁴³ Common, OXFORD LANGUAGES (last visited Sept. 26, 2024).

⁴⁵ Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983). Under the APA, agency action will be set aside if "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2)(A).

See Mexican Gulf Fishing Co. v. U.S. Dep't of Commerce, 60 F.4th 956, 973 (5th Cir. 2023); see also Michigan v. EPA, 576 U.S. 743, 753 (2015) (holding that a statutory requirement that an agency determine whether "regulation is appropriate and necessary" is not "an invitation to ignore cost").

The Agencies undertook no analysis of the role of CUSIP and FIGI in the markets and how market participants currently use identifiers within their operations, including the value of fungibility. By failing to do so, the Agencies did not consider the limitations of FIGI. ⁴⁷ They also did not analyze the significant economic impact of shifting an entire market ecosystem from an established financial instrument identifier to a relatively new identifier such as FIGI, including the massive costs market participants would incur changing hundreds of systems. ⁴⁸ The Agencies did not explain why any change is necessary given the lack of any functional shortcomings with respect to the purpose and role of CUSIP or instruction from Congress to change course.

A. The Agencies did not consider CUSIP's role in the functioning of the U.S. and Global Markets

CUSIP has a proven track record in facilitating the orderly functioning of the U.S. and through ISIN the global markets. CUSIP covers a wide range of financial instruments, including extensive equity issues, fixed income, derivatives, U.S.- and Canadian-listed equity options and single stock futures, as well as loans, whether syndicated, municipal, corporate, or otherwise. Over the decades, CUSIP and ISIN have become integral to how global financial institutions maintain interoperability among various data sources to ensure consistency of information flowing from multiple data sources to internal systems that use financial instrument identifiers for raising capital, trading, clearance, settlement, valuation, reporting, recordkeeping, monitoring of positions and managing risk, among other functions.

Capital Formation. CUSIPs enable issuers to efficiently raise capital in the markets. Once assigned, CUSIP and CINS provide market participants with assurance that the issue is valid and that the identifier is linked to the valuable underlying reference data to assess the attributes of the issuance and the issuer. It also helps assure the speed and accuracy in clearance and settlement.

CUSIP provides the most up-to-date, standardized pre-trade security information, which is important for underwriters in securities issuances. As part of the process of assigning a CUSIP identifier in connection with a new security issuance, CGS reviews necessary primary source documents such as a bond's offering circular or equity's preliminary prospectus to determine the issuer's identity, craft security descriptions and collect necessary data on the issuance, ensure consistency of the data fields, and most importantly, ensure the end result of this process is the

See State Farm, 463 U.S. at 43. In fact, as demonstrated by the SEC's recent adoption of amendments to Forms N-PORT and N-CEN, the Agencies have not even attempted to assess the costs of choosing common identifiers. Form N-PORT and Form N-CEN Reporting; Guidance on Open-End Fund Liquidity Risk Management Programs, 89 Fed. Reg. 73,764 (Sept. 11, 2024). Specifically, the SEC amended these forms to allow for registered funds to report an alternative identifier.

North America's Bldg. Trades Unions v. OSHA, 878 F.3d 271, 296 (D.C. Cir. 2017) (requiring agency conducting feasibility analysis to "use the best available evidence" to consider whether the proposed standard would "threaten massive dislocation to, or imperil the existence of, the industry, including a "reasonable estimate of compliance costs," as well as assessing whether the proposed standard would "threaten the . . . competitive structure of [the] industry.").

⁴⁹ Appendix B provides a chart of all asset classes covered by CUSIP.

creation of a fungible identifier.⁵⁰ Because issuers typically apply for CUSIP identifiers prior to issuance and communicate with CGS regarding the final terms of the securities, CUSIP is thus able to provide the most up-to-date, standardized pre-trade security information, which is important for underwriters and investors in securities issuances.⁵¹

Trading, Clearance and Settlement. The current U.S. and global trading, clearance and settlement process relies heavily on CUSIP and ISIN. A 2022 CUSIP Global Services Client Survey (the "CGS Survey") conducted by CGS demonstrates that the overwhelming majority of the financial industry (some 78%), including asset managers, broker-dealers, banks, insurance companies and market authorities, have adopted CUSIP as their "relied upon identifier" to facilitate clearance and settlement of securities transactions.⁵²

The 1972 adoption of CUSIP as the financial instrument identifier by all U.S. brokerage firms caused settlement efficiency to skyrocket because it enabled "book entry" transfer of ownership with cash transfers limited to purchases that were not offset by net sales.⁵³ CUSIP's fungibility permits accurate delivery and processing regardless of whether the financial instrument changed hands in the secondary market or where it was traded.⁵⁴

CUSIP is utilized by the Depository Trust Company (the "<u>DTC</u>"), a central securities depository created in 1973.⁵⁵ CUSIP and its fungibility enabled DTC to reduce costs and to provide clearing and settlement efficiencies to use "book entry" changes to ownership of the securities. The DTC system relies on CUSIP and ISIN to record the deposit and electronic transfer of interests in securities and enables DTC participants to not hold title to a specific security and instead hold a ratable interest in the entire inventory of that security.⁵⁶ In 2020, DTC settled transactions worth \$2.3 quadrillion, and processed an amount equal to the U.S. gross domestic product approximately every three days.⁵⁷ DTC retained custody of more than 3.5 million securities issues worth \$73.5 trillion, including securities issued in the U.S. and 170 foreign countries.⁵⁸ This enormous volume relies on CUSIP and ISIN and their fungibility.

See MORRIS, supra note 16, at 12-13.

⁵¹ *Id.* at 13.

⁵² 2022 CUSIP Requester and Subscriber Survey Results, CUSIP GLOBAL SERVICES (2022) (available upon request) [hereinafter "CUSIP Survey"].

MORRIS, supra note 16, at 5; Virginia B. Morris, Guide to Clearance & Settlement: An Introduction to DTCC, DEPOSITORY TRUST & CLEARING CORPORATION, at 5 (2021), https://www.dtcc.com/media/Files/Downloads/Press-Room/DTCC-Clearance-Settlement-Interactive-2021.pdf.

MORRIS, *supra* note 16, at 17.

Demystifying DTC: The Depository Trust Company and the Municipal Bond Market, NAT'L ASS'N OF BOND LAWYERS, at 3-4 (Mar. 2017), https://www.nabl.org/wp-content/uploads/2023/02/20170331-NABL-Demystifying-DTC.pdf.

⁵⁶ DTCC Eligible, ISIN, https://www.isin.com/dtcc-eligible/ (last visited Oct. 15, 2024); Demystifying DTC, supra note 55, at 4.

⁵⁷ *Guide to Clearance & Settlement, supra* note 53, at 2.

⁵⁸ *Id*.

As another example, mutual fund transfer agents rely heavily on CUSIP. As recognized by the SEC, "[t]he growth in both mutual fund products and share classes offered has added complexity and requires Mutual Fund Transfer Agents to maintain, in addition to the master securityholder file, extensive CUSIP databases that define the characteristics and processing rules for each fund share class to ensure prospectus compliance and accurate processing and recordkeeping of mutual fund transactions." ⁵⁹

CUSIP also has facilitated the shortening of the settlement cycle, which reduces the risks inherent in the clearance and settlement cycle. From 1968 to the present, the settlement cycle has been reduced from five days to one day. When the SEC recently mandated that the settlement cycle be reduced to trade date plus one business day ("T+1") on a compressed timeline, the Depository Trust & Clearing Corporation ("DTCC") used CUSIP to facilitate the transition by identifying existing production CUSIPs as "T+1 testing CUSIPs" for industry members to use to test the functional changes thus reflecting that CUSIPs are central to the settling of transactions and avoiding trade fails.

Regulatory Reporting. CUSIPs have been the designated means of identifying financial instruments for nearly every financial reporting form that requires a financial instrument identifier collected by the Agencies, a selected sampling of which is described below.⁶²

SEC: A notable example is Section 13(f) of the Securities Exchange Act of 1934 (the "Exchange Act"), which requires institutional investment managers to report to the SEC certain information with respect to accounts over which they exercise investment discretion.⁶³ The Exchange Act specifies that this collection of information must include, among other things, "the name of the issuer and the title, class, [and] CUSIP number . . ."⁶⁴ The SEC provides a list of which securities are reportable for Section 13(f) on a quarterly basis and that list is organized by CUSIP.⁶⁵ The SEC requires the use of CUSIP in almost every notable collection of information across its regulated entities, including investment companies, investment advisers, broker-dealers, and clearing agencies.

<u>FDIC</u>: In call reports that must be filed by banks quarterly with the FDIC, banks are required to provide certain information about the bank's financial health. With respect to reporting on securities, the instructions to the form require CUSIPs. For example, in one of the schedules to the call report (Schedule RC-T (Fiduciary and Related Services)), Memoranda item 2, the

Appendix A lists out all of the current statutes, regulations and forms of the Agencies that either (a) require reporting a CUSIP to identify financial instruments or (b) reference CUSIP in its instructions or notes.

⁵⁹ Transfer Agent Regulations, 80 Fed. Reg. 81,948, 81,992 (Dec. 31, 2015).

Guide to Clearance and Settlement, supra note 53, at 5; Test CUSIPs for T+1 Industry Testing, DTCC (July 21, 2023), https://www.dtcc.com/ust1/-/media/Files/PDFs/T2/Test-CUSIPs.

⁶¹ Id.

^{63 15} U.S.C. § 78m(f).

 $^{^{64}}$ Id. at § 78m(f)(1)(A).

See, e.g., SEC. EXCH. COMM'N, LIST OF SECTION 13F SECURITIES: THIRD QUARTER FY 2024 (2024), https://www.sec.gov/files/investment/13flist2024q3.pdf.

reporting entity is required to report, among other things, certain securities holdings in corporate trust and agency accounts. The form's instructions specify that securities with different CUSIP numbers indicate separate issues.⁶⁶

<u>FRB</u>: The disclosure for the Fedwire Securities Service ("<u>Fedwire</u>"), an electronic central securities deposit and securities settlement system managed and operated by the Federal Reserve Banks, states that Fedwire includes CUSIP identifiers in its records to help issuers and participants to identify securities and also requires participants (the sender) to identify securities with a CUSIP in securities transfer messages.⁶⁷ Fedwire call notices—which are announcements from issuers of Fedwire-eligible securities that a security will be retired or called prior to its maturity date—also include CUSIP identifiers.⁶⁸

<u>CFTC</u>: CFTC Rule 1.27 sets forth recordkeeping requirements for futures commission merchants ("<u>FCM</u>") and derivatives clearing organizations ("<u>DCO</u>") in connection with the investment of customer funds under CFTC Rule 1.25, listing the types of information that an FCM or DCO must retain. Specifically, each FCM and DCO investing customer funds is required to keep a record showing a "description of the instruments in which such investments were made, including the CUSIP or ISIN numbers,"⁶⁹ and each DCO receiving documents from its clearing members representing investment of customer funds must keep a record showing separately for each clearing member "a description of such documents, including the CUSIP or ISIN numbers."⁷⁰

<u>Treasury</u>: The Treasury requires entities controlling a position in a particular Treasury security (or securities) above a certain threshold to submit a "large position report," which mandates disclosing "the CUSIP identifier for the security being reported."

⁷⁰ 17 C.F.R. § 1.27(b)(2).

FED. DEPOSIT INS. CORP., INSTRUCTIONS FOR SCHEDULE RC-T-12 OF THE FFIEC 031 AND 041 REPORT FORMS (updated Sept. 2023), https://www.fdic.gov/resources/bankers/call-reports/crinst-031-041/2023/2023-09-rc-t.pdf ("Report in column A the total number of corporate and municipal issues, including equities such as trust preferred securities, and asset-backed securities for which the institution serves as trustee. Also report other debt issues, such as unit investment trusts and private placement leases, for which the institution serves as trustee Securities with different CUSIP numbers should be considered separate issues."); see also FED. FIN. INST. EXAMINATION COUNCIL, CONSOLIDATED REPORTS OF CONDITION AND INCOME FOR A BANK WITH DOMESTIC AND FOREIGN OFFICES—FFIEC 031 (Sept. 30, 2024), https://www.ffiec.gov/pdf/FFIEC_forms/FFIEC031 202409 f.pdf.

FEDWIRE SEC. SERV., FEDWIRE SECURITIES SERVICE DISCLOSURE 19, 105 (Dec. 1, 2023), https://www.frbservices.org/binaries/content/assets/crsocms/financial-services/securities-service-disclosure.pdf.

Fedwire Call Notices, FED. RES. BANK SERVICES (last visited Oct. 18, 2024), https://www.frbservices.org/app/callnotices/callNoticesHome.html.

⁶⁹ 17 C.F.R. § 1.27(a)(4).

⁷¹ 17 C.F.R. § 420.3(f). *See, e.g.*, Treasury Calls for Large Position Reports (July 11, 2023), https://home.treasury.gov/news/press-releases/jy1605. *See* discussion *infra* notes 77-84 regarding the Treasury's use of CUSIP to issue treasury securities.

<u>FHFA</u>: "Fannie Majors" are pools of loans that are contributed by more than one lender.⁷² Lenders participating in a Fannie Majors pool receive MBSs representing its share of the pool in proportion to the dollar amount of mortgages it contributed to the pool.⁷³ When a lender transmits its loan delivery data to Fannie Mae, it must include a Delivery Schedule (Form 2014) for MBS pools, which requires including CUSIP identifiers related to the MBS pool the lender is contributing to.⁷⁴

NCUA: The NCUA runs its annual stress-testing program for applicable credit unions through its ongoing quarterly data collection program. The data request for this program is published annually and requires, among other things, reporting entities to report instrument-level data for all of their investments, including the CUSIP of their investments.⁷⁵

OCC: Banks that manage Short-Term Investment Funds ("STIF") file a monthly schedule with the OCC pursuant to 12 C.F.R. § 9.18 disclosing information about the STIF and its portfolio holdings within five business days after each calendar month-end. For each instrument held by the STIF, the CUSIP identifier must be disclosed.⁷⁶

U.S. Government Securities Issuance. The U.S. Government relies on CUSIP in its capacity as a market participant when the Treasury issues U.S. Treasury securities.⁷⁷ The Treasury issues an auction announcement to provide public notice of the sale of bills, notes, and bonds, and the announcement lists the specific details of each auction such as offering amount, CUSIP identifier, and issue and maturity dates.⁷⁸ The U.S. Treasury market is the largest and most liquid bond market worldwide and plays a foundational role in the global financial system. As of September 2024, total outstanding U.S. Treasuries were \$27.7 trillion and the average daily trading volume was approximately \$911.6 billion.⁷⁹ While issued by the U.S. government to finance

Originating & Underwriting: Selling Guide, FANNIE MAE (Sept. 4, 2024), https://selling-guide.fanniemae.com/sel/c3-6-01/parameters-pooling-loans-fannie-majors#:~:text=Fannie%20Majors%20are%20pools%20of%20loans%20that%20are,amount%20of%20mortgages%20it%20contributed%20to%20the%20pool.

⁷³ *Id*.

⁷⁴ *Id.*; FANNIE MAE, SELLING GUIDE: FANNIE MAE SINGLE FAMILY, Part C3-7-04, 1008-09 (Sept. 4, 2024), https://singlefamily.fanniemae.com/media/39861/display.

NAT'L CREDIT UNION ADMIN., NCUA SUPERVISORY STRESS TEST: ANNUAL DATA REQUEST INSTRUCTIONS 3-4 (Jan. 2024), https://ncua.gov/files/publications/regulations/ncua-annual-sst-supplemental-data-request-2024.pdf.

Monthly Schedule of Short-Term Investment Funds, OFFICE OF THE COMPTROLLER OF THE CURRENCY, https://www.occ.treas.gov/topics/supervision-and-examination/capital-markets/asset-management/short-term-investment-funds.html (last visited Oct. 2, 2024).

⁷⁷ See 31 C.F.R. §§ 356.0-356.35.

^{78 31} C.F.R. § 356.10. See Treasury Securities Upcoming Auctions Data, FISCALDATA, https://fiscaldata.treasury.gov/datasets/ upcoming-auctions/treasury-securities-upcoming-auctions (last visited Sept. 26, 2024); Treasury Securities Auctions Data, FISCALDATA, <a href="https://fiscaldata.treasury.gov/datasets/treasury-securities-auctions-data/treasury-securities-auctions-data/treasury-securities-auctions-data/treasury-securities-auctions-data/treasury-securities-auctions-data/treasury-securities-auctions-data/ (last visited Oct. 5, 2024) (providing data on announced and auctioned marketable Treasury securities, which can be organized by CUSIP identifier).

⁷⁹ See U.S. Treasury Securities Statistics, SECURITIES INDUSTRY AND FINANCIAL MARKETS ASSOCIATION, https://www.sifma.org/resources/research/us-treasury-securities-statistics/ (last visited Oct. 2, 2024).

government spending, U.S. Treasuries play a broad role in the market. For example, they underpin the strategies of many asset managers and the U.S. Treasury repo market is a key transmission mechanism for U.S. monetary policy. In May 2024, the Treasury announced the launch of a debt buyback program and purchased \$11.23 billion par amount through nine buyback operations between May and July 2024. In each operation, the Treasury offered to purchase up to 20 CUSIPs. Treasury's ability to tie each buyback to a CUSIP facilitated the orderly functioning of the program given that each redemption reduced the par amount outstanding of that security. The Treasury then published the final results showing the total amount that the Treasury has bought back and the weighted average accepted prices at a CUSIP level.

Internal Data and Risk Management. CUSIP was created to address the risk of failure in a trading and settlement system that became overwhelmed allowing for outright fraud. It has since continued its role in helping market participants manage internal communications, recordkeeping and risk. CGS reference data provides users with up to 60 different data elements for each of the covered financial instruments that can be imported into internal systems and files. Market participants use the CGS reference data to help manage internal recordkeeping, including keeping track of instruments they hold for investors, evaluating the financial obligations of potential counterparties, identifying relationships between companies and affiliates, and ensuring compliance with regulatory and tax obligations. The CGS reference data also facilitates the deposit of dividend payments into bank accounts, buying additional shares through dividend reinvestment programs, delivering proxy materials and updating ownership records in the event of a stock split and other corporate actions. 85 For example, CUSIP has specific rules for corporate actions that are tailored to balance efficiency and clarity and are designed to counteract trading mishaps, settlement failures, recordkeeping inaccuracies, and, importantly, fraud. These rules dictate when certain actions like corporate and mutual fund name changes will not trigger a change in the entity's CUSIP identifier while certain actions, such as reverse stock splits, acquisitions resulting in capitalization changes or purposeful delisting, will.86

Many back-office functions rely on CUSIP and the CGS reference data to promote interoperability between the various systems and help ensure that they have up-to-date and

See Treasury Market Structure, SECURITIES INDUSTRY AND FINANCIAL MARKETS ASSOCIATION, https://www.sifma.org/explore-issues/treasury-market-structure/ (last visited Sept. 26, 2024).

See Off. Debt Mgmt., Dep't of the Treasury, Regular Treasury Buyback Program Details 8 (Apr. 2024), https://home.treasury.gov/system/files/221/TreasurySupplementalQ22024.pdf.

See Off. Debt Mgmt., Dep't of the Treasury, Liquidity Support Buyback Results: 5/29/24 to 7/24/24 2 (July 2024), https://home.treasury.gov/system/files/221/TreasurySupplementalQ32024.pdf.

⁸² Id

Treasury Debt Buyback Operation Results, DEP'T OF THE TREASURY, BUREAU OF THE FISCAL SERVICE (Apr. 3, 2024), https://treasurydirect.gov/instit/annceresult/press/preanre/2024/BBR_20240403174000.pdf.

MORRIS, *supra* note 16, at 9.

CUSIP Permanence FAQ, CUSIP GLOBAL SERVICES (July 2021), https://www.cusip.com/pdf/news/CUSIPGlobalServices-Permanence-FAQ.pdf. CUSIP Permanence does not apply to MBS, asset-backed securities or municipal bonds, and it will not affect the traditional assignment of a new CUSIP in the event of a reverse or forward stock split with required exchange or shares or creation of a new legal entity as a result of a corporate merger or reorganization. Id.

accurate information about the instrument. For example, CGS offers a validation service that allows users to check the accuracy of their portfolios against the CGS reference data. When market participants source data from multiple vendors, data corruption can occur. Checking against a reliable and authoritative source can ensure information accuracy. CUSIP identifiers also highlight the relationship between companies and their subsidiaries permitting market participants to monitor positions and concentration in investments.

Over the long history of CUSIP, firms have found widespread benefits and uses for CUSIP outside of its initial role in trade clearance and settlement. In the Proposed Rule, the Agencies did not consider any aspect of CUSIP's role in financial reporting, let alone the U.S. and global markets. Without "examin[ing] the relevant data and articulat[ing] a satisfactory explanation" for their exclusive choice of FIGI, the Agencies have not provided a rational explanation. 89

Monitoring Risk. The Agencies, as members of the Financial Stability Oversight Council (the "Council"), require a comprehensive picture of the U.S. financial system. The Council was established on July 21, 2010 by the Dodd-Frank Wall Street Reform and Consumer Protection Act to provide accountability for identifying risks and responding to emerging threats to financial stability. To do this, the Agencies require an understanding of how market participants are exposed to each other through ownership of loans, credit, securities and other relationships. The FDTA would, by increasing data transparency and interoperability, enhance the ability of the Agencies to monitor for systemic risk in the financial system. That is why global, fungible identifiers are critical to the effort. In fact, the Council, through its efforts to promote the global adoption of LEI, has recognized the importance of such global legal identifier in achieving better data quality. In order to fulfill the Council's critical role, the Agencies share data they collect from regulated entities. As reflected in Appendix A of this letter, much of this data includes CUSIP as the financial instrument identifier. Exclusively selecting FIGI therefore would hinder

87 CUSIP Global Services Launches Portfolio Validation Services, PR NEWSWIRE (Oct. 10, 2012), https://www.prnewswire.com/news-releases/cusip-global-services-launches-portfolio-validation-service-173467511.html.

As an illustrative example, for the municipal bond with identified with FIGI code BBG014BVCY10, the maturity date on record with the Municipal Securities Rulemaking Board ("MSRB") through EMMA is February 3, 2022, and the CGS reference data is consistent with that of the MSRB. However, the reference data available on OpenFIGI implies that the maturity date is in 2071 by having the ticker name "CA ORAWTR 10/07/2071."

⁸⁹ State Farm, 463 U.S. at 43; see also Chamber of Com. v. S.E.C., 85 F.4th 760, 779 (5th Cir. 2023).

See, e.g., Council, Financial Stability Oversight Council Statement on Nonbank Financial Intermediation (Feb. 4, 2022), https://home.treasury.gov/system/files/261/FSOC_Nonbank_Financial_Intermediation.pdf ("U.S. openend funds were among the largest recorded sellers of U.S. Treasuries, U.S. municipal bonds, and possibly U.S. corporate debt during [the COVID-19 pandemic].").

The Council's member agencies assess, monitor, and mitigate risks to U.S. financial stability, and the Council facilitates cooperation and communication among member agencies on financial stability-related matters. *See Financial Stability Oversight Council*, DEP'T OF THE TREASURY, https://home.treasury.gov/policy-issues/financial-markets-financial-institutions-and-fiscal-service/fsoc. OFR was established by the Dodd-Frank Act to principally support the Council and its member agencies. *See About Us*, OFF. FIN. RESEARCH, https://www.financialresearch.gov/about/ (last visited Oct. 16, 2024).

⁹² See FIN. STABILITY OVERSIGHT COUNCIL, ANNUAL REPORT, at 112-113 (2023), https://home.treasury.gov/system/files/261/FSOC2023AnnualReport.pdf.

the ability of the Agencies to analyze that data and monitor risk. First, they would be artificially segmenting, as discussed above, financial reporting from the entire life cycle of the financial instrument in the market that exists outside of mere reporting. Second, they would artificially segment U.S. market reporting from global reporting and other functions given the lack of use of FIGI globally. Finally, the data they would collect would be impaired due to the lack of fungibility, as noted above and elaborated further below in Section III.B.

In addition to sharing data with the Council, the Agencies collect data to monitor risk in their particular area of the financial markets. Below is a list of certain examples.

SEC and CFTC: The SEC and CFTC use data collected from Form PF, a form filed by private fund advisers to report to the SEC and CFTC information that is primarily designed to facilitate the Council's monitoring of systemic risk in the private fund industry. ⁹³ In its latest amendments to Form PF in 2024, the SEC and CFTC noted that the amendments "are designed to enhance [the Council's] ability to monitor systemic risk as well as bolster the SEC's regulatory oversight of private fund advisers and investor protection efforts." The SEC also publishes reports on significant market events. ⁹⁵

<u>Treasury</u>: The Treasury's large position reporting program discussed above requires entities controlling a position in a particular Treasury security (or securities) equaling or exceeding a specified threshold to submit a large position report. The specific Treasury securities are identified by CUSIP identifier enabling the Treasury to monitor the impact of concentrations of positions in the Treasury securities market.⁹⁶

FDIC: The FDIC protects bank depositors by periodically examining the trust operations of FDIC-regulated financial institutions. These examinations determine if an institution's policies or the way it administers accounts has resulted in a contingent liability or estimated loss that could damage the institution's capital.⁹⁷ The FDIC's Trust Examination Manual, which is designed to assist regulators in planning and conducting regulatory examinations of trust departments, notes that a trustee should maintain records of CUSIP identifiers of all of its canceled, destroyed or otherwise disposed securities certificates and also ensure that trustees are complying with reporting

Form PF; Reporting Requirements for All Filers and Large Hedge Fund Advisers, 89 Fed. Reg. 17,984, 18,049 (Mar. 12, 2024) (emphasis added) ("Form PF Adopting Release").

See SEC, Form PF, at 10, https://www.sec.gov/files/formpf.pdf (last visited Oct. 21, 2024).

See, e.g., SEC. EXCH. COMM'N, STAFF REPORT ON EQUITY AND OPTIONS MARKET CONDITIONS IN EARLY 2021 (Oct. 14, 2021), https://www.sec.gov/files/staff-report-equity-options-market-struction-conditions-early-2021.pdf (analyzing among other things holdings in GameStop securities).

See Large Position Reporting (LPR), TREASURYDIRECT, https://treasurydirect.gov/laws-and-regulations/gsa/lpr-reports/ (last visited Oct. 16, 2024).

⁹⁷ *Trust Examination Overview*, FDIC (last updated Sept. 11, 2024), https://www.fdic.gov/bank-examinations/trust-examination-overview.

requirements for missing, lost, stolen or counterfeit corporate securities that have a CUSIP identifier.⁹⁸

<u>Inter-Agency Monitoring</u>: The Inter-Agency Working Group for Treasury Market Surveillance ("<u>IAWG</u>") was formed by the Treasury, the FRB, the Federal Reserve Bank of New York, the SEC and the CFTC in 1992 to improve monitoring and surveillance and strengthen interagency coordination with respect to the Treasury markets.⁹⁹ It has published a number of reports on the Treasury market, including on Treasury issuances and holdings of Treasury securities by market participants.¹⁰⁰

B. The Agencies did not consider that fungibility is critical for the effective and transparent operation of the markets and financial reporting

The global market relies on the fungibility of financial instruments. ¹⁰¹ CUSIPs are fungible because each financial instrument has exactly one CUSIP identifier that represents the same instrument regardless of the venue where it is traded. Fungibility reduces inefficiencies and errors and provides increased transparency to regulators and the markets. It allows for interoperability among different data sources and different functions, including in financial regulatory reporting, government securities issuances, risk monitoring and facilitating clearing and settlement, including cross-border transactions. It allows the Agencies to effectively collect information which is why a large part of financial reporting requires CUSIP. ¹⁰² In the Proposed Rule, the Agencies did not discuss or consider the impacts of a non-fungible identifier on the quality and interoperability of data in financial reporting.

As a financial instrument identifier, FIGI is not fungible. It is a complex and diffuse identification system which, while useful for certain functions, increases error rates. FIGI was designed to store and interrelate (through data hierarchies) information specific to each security *as*

FDIC, TRUST EXAMINATION MANUAL, Section 6 (last updated Sept. 11, 2024), https://www.fdic.gov/bank-examinations/section-6-account-administration-corporate-trust-accounts.

See, e.g., Inter-Agency Working Grp., Enhancing the Resilience of the U.S. Treasury Market: 2023 Staff Progress Report, at 1.

See, e.g., id. at 4 ("According to SEC Form N-MFP data, MMF holdings of Treasury bills grew by nearly \$850 million" and "The 2-, 5-, and 10-year nominal coupon auctions grew faster than surrounding tenors to maintain the structural balance of supply and demand across the curve.").

¹⁰¹ See discussion supra § I.

See supra Section I.B and Appendix A. In fact, the Agencies have shared data with CUSIP as the financial instrument identifier. See, e.g., Form 13F Data Sets, SEC, https://www.sec.gov/data-research/sec-markets-data/form-13f-data-sets; Fails-to-Deliver Data, SEC, https://catalog.data.gov/dataset/fails-to-deliver-data; Auction Results, DEP'T OF THE TREASURY, https://catalog.data.gov/dataset/auction-results; Auction Allotments By Investor Class For Marketable Treasury Bill Securities, Auction Allotments By Investor Class For Marketable Treasury Bill Securities, DEP'T OF THE TREASURY, https://catalog.data.gov/dataset/auction-allotments-by-investor-class-for-marketable-treasury-bill-securities; System Open Market Account Holdings of Domestic Securities, FED. RES. BANK OF N.Y., https://www.newyorkfed.org/markets/soma-holdings.

traded on a particular exchange, e.g., pricing. The hierarchies vary depending on asset class. ¹⁰³ For example, for certain equities instruments, there are exchange-level FIGIs (an identifier issued per instrument per trading venue), composite FIGIs (an identifier within the same country, market, or currency) and a share class FIGI (an identifier regardless of country or trading venue). For these equities, share class FIGI is fungible. However, share class FIGI does not exist for other asset classes such as options, municipal securities or treasury bonds. Furthermore, in the case of unlisted funds and securities of private companies, the venue-specific and composite FIGIs are the same as each other while there is no share class FIGI. And, for municipal bonds, corporate bonds, and U.S. Treasury issuances, only the exchange-level FIGI exists (*i.e.*, no composite or share class FIGIs at all). Thus, FIGI can represent different things depending on the asset class. The Proposed Rule does not even specify which of these FIGI codes should be used for reporting purposes. ¹⁰⁴ An example of the limited fungibility is illustrated by a search of Microsoft common stock on OpenFIGI, which returns 220 FIGI codes for Microsoft common stock alone and over 857,000 FIGI codes for various types of related equity derivatives and futures, some of which do not have share class FIGIs or composite FIGIs. ¹⁰⁵

As a result, transitioning to exclusively using FIGI would actually deteriorate interoperability and hinder data sharing as a result of the fact that multiple FIGIs can be used for one security. This would persist not just in financial reporting, but also in the storage and management of data, which is based on instrument-level identifiers, throughout the financial system. These limitations of using FIGI in financial reporting due to its complexity are not theoretical. In the few cases where FIGIs are allowed on an optional basis in financial reporting to certain of the Agencies, FIGI use has demonstrated the issues with respect to its non-fungibility as certain filings have been riddled with errors.

An analysis of SEC Form 13F filings, in which filers are instructed to include share class-level FIGIs if a filer chooses to report a FIGI, demonstrates the high error rates when using FIGI to report securities.¹⁰⁶ From January 2023 to August 2024 (the "Sample Period"), only 13.5% of

See OBJECT MANAGEMENT GROUP, OPENFIGI et al., ALLOCATION RULES FOR THE FINANCIAL INSTRUMENT GLOBAL IDENTIFIER (FIGI) STANDARD 6 (ver. 29.9, July 2022) [hereinafter "Allocation Rules"], https://www.openfigi.com/assets/local/figi-allocation-rules.pdf.

Contrast with SEC reporting that at least specified the share class FIGI (which does not exist for certain asset classes outside of equities). See SEC, Form 13F – Information Required of Institutional Investment Managers Pursuant to Section 13(f) of the Securities Exchange Act of 1934 and Rules Thereunder, at 7, https://www.sec.gov/files/form13f.pdf (specifying that Column 3 should include share class level FIGIs).

Search results of Microsoft common stock on OpenFIGI, OPENFIGI, https://www.openfigi.com/search#!?simpleSearchString=microsoft&page=1&filters=SECURITY_TYP:..common%20stock (last visited Oct. 21, 2024, 9:00AM); see also https://www.openfigi.com/search#!?simpleSearchString=microsoft&page=1&filters=SECURITY_TYP:..common%20stock (last visited Oct. 21, 2024, 9:00AM); see also https://www.openfigi.com/search#!?simpleSearchString=microsoft&page=1&filters=SECURITY_TYP:..common%20stock (last visited Oct. 21, 2024, 9:00AM); see also Appendix C, which includes screenshots of a search of Microsoft common stock on OpenFIGI returning 220 codes.

¹⁰⁶ See 13F Analysis, supra note 9, at 4-6.

institutional asset managers included a FIGI number at least one time and only 10.7% of all Form 13F filings included at least one FIGI. 107

The 13F Analysis found that 59.6% of reported FIGIs were not *share class*-level FIGIs. Analyzing the non-share class level FIGIs included during the Sample Period, the 13F Analysis found:

- 30.6% of all unique FIGIs were composite-level FIGIs;
- 15.8% of all FIGIs were identified as neither share class nor composite-level FIGIs, but as another type of FIGI, such as a trading venue-level FIGI or a FIGI for options;
- 13.2% of all unique entries in the FIGI field were invalid FIGIs, reflecting apparent data entry errors; and
- more than 660 unique entries were formatted like 12-character ISINs, which the investment managers may have confused for 12-character FIGIs. 108

Take SPDR S&P 500 Trust ETF, an ETF with over \$580 billion in assets, as an illustrative example. In the 13F Data, the SPDR S&P 500 Trust ETF was linked with 29 distinct FIGIs. These included the share class-level FIGI and 28 other FIGIs, such as the U.S. composite FIGI, three trading venue-level FIGIs, 21 FIGIs identifying related option securities, two FIGIs identifying unrelated instruments, and one FIGI that cannot be identified in the OpenFIGI database. These types of errors would severely hinder the Agencies' efforts to aggregate and share data and to fulfill their mission as members of the Council.

Accordingly, on fungibility alone, it is clear from even a cursory review of the 13F data that the choice of FIGI as the exclusive financial instrument identifier for financial reporting does not have a rational basis.¹¹⁰

Id., at 4. As shown in Figure 1 of the 13F Analysis, the share of institutional asset managers that filed a Form 13F with a FIGI does not fluctuate significantly over time, indicating that the uptake of FIGI reporting has been relatively stable since the introduction of the optional FIGI field in early 2023. Id. at Table 1.

See id. at 5-6. While FIGIs always begin with either "BBG" or "KKG," those entries begin with country-level codes used for ISINs.

¹⁰⁹ *Id.* at 5; Table 1.

¹¹⁰ State Farm, 463 U.S. at 43; see also Chamber of Commerce v. S.E.C., 85 F.4th 760, 779 (5th Cir. 2023).

C. The Agencies have not adequately considered or assessed the costs and benefits of the Proposed Rule

Courts look to whether the "agency [has] examine[d] the relevant data and articulate[d] a satisfactory explanation for its action including a 'rational connection between the facts found and the choice made," or "failed to consider an important aspect of the problem." In particular, courts have found that consideration of a regulation's economic impacts and "costs and benefits" are a necessary part of reasoned decision-making. 112

The Agencies attempt to sidestep the obligation to analyze the costs by claiming that the Proposed Rule "only applies to the Agencies themselves – it does not apply to any other entities." This reading ignores the plain language of the FDTA. The purpose of the FDTA is to "establish data standards for the collections of information *reported to each covered agency by financial entities under the jurisdiction of the covered agency.*" This reading ignores that seven of the nine Agencies will have to promulgate Agency-specific rules, applicable to the financial entities under their jurisdiction, to implement any final data standards and common identifiers.

The failure to consider the economic impacts of the Proposed Rule cannot be cured at the individual rulemaking stage. The choice to establish FIGI as the exclusive financial instruments identifier was made by the Agencies acting together, and so requires an explanation of *that* decision, not just the decisions made by the implementing Agencies. Meaning, the Proposed Rule necessarily *will* force a change throughout the financial markets as market participants will have to undergo an extensive mapping exercise at the very least and it is not clear this is even possible

¹¹¹ State Farm, 463 U.S. at 43.

See Mexican Gulf Fishing Co. v. U.S. Dep't of Commerce, 60 F.4th 956, 973 (5th Cir. 2023); see also Michigan v. EPA, 576 U.S. 743, 753 (2015) (holding that a statutory requirement that an agency determine whether "regulation is appropriate and necessary" is not "an invitation to ignore cost").

¹¹³ Proposed Rule, *supra* note 2, at 67,901, 67,903.

^{114 12} U.S.C. § 5334(b)(1)(A) (emphasis added).

Preliminary Economic Analysis, at ¶30 ("The Proposed Rule does not include any analysis of the baseline or the Proposed Rule's likely economic consequences—benefits or costs—but instead defers to the second stage Agency-specific rulemaking that would follow the adoption of the Proposed Rule."). The individual rulemaking portion of the FDTA instructs the agencies to "incorporate, and ensure compatibility with (to the extent feasible), all applicable data standards established in the rules promulgated under [12 U.S.C. § 5334], including, to the extent practicable, by having the characteristics described in clauses (i) through (vi) of subsection (c)(1)(B) of such section 5334." See, e.g., 12 U.S.C. §§ 1467a(u)(2), 4527(b), 5498(b); 15 U.S.C. §§ 77z-4(b), 78o-3(n)(2) (emphasis added). As the Proposed Rule acknowledges, the implementing Agency will have to undergo a feasibility analysis and may determine that "using the identifier established by the final joint rule was not feasible." Proposed Rule, supra note 2, at 67,895 n.20. The very purpose of the FDTA is uniformity in financial reporting across the Agencies, and it instructs the Agencies when "establishing data standards," to "promote interoperability of financial regulatory data across members of the Council." 12 U.S.C. § 5334(c)(2)(B). Accordingly, the Agencies must consider whether the individual rulemaking is likely to result in broad uniformity in the adoption of the joint standards, including the proposed financial instrument identifier. If it turns out (as appears likely) mandating FIGI instead of CUSIP will be infeasible for some, but not all, relevant Agencies, the ultimate result will be a patchwork of reporting requirements, undermining the intent of the FDTA. As such, analyzing the economic feasibility of FIGI before the individual rulemaking takes place is necessary.

at all given that CUSIP and FIGI are not readily interchangeable and FIGI is not fungible. In fact, in the CGS Survey, 90% of the respondents replied that the operational impact in the absence of CUSIP would be disruptive to their business. The Agencies therefore have unreasonably and inappropriately punted the legally required assessment of the costs and benefits of the rule by ignoring the ultimate impact of the Proposed Rule – that it is intended to apply to collections of information reported by financial entities to the Agencies.

The Proposed Rule acknowledges that the individual Agencies will undertake a feasibility analysis when implementing the joint standards, and the Agencies may determine that "using the identifier established by the final joint rule was not feasible." The inevitable "feasibility" analysis each individual Agency will conduct will necessarily include an analysis of the proposed joint data standards "economic feasibility." An economic feasibility analysis requires an agency to "use the best available evidence" to consider whether the proposed standard "threaten[s] massive dislocation to, or imperil[s] the existence of, the industry." This necessarily includes a "reasonable estimate of compliance costs," as well as assessing whether the proposed standard would "threaten the . . . competitive structure of [the] industry." Such a feasibility analysis would have to consider the disruptive and destabilizing impact this policy choice would have on U.S. and global markets, and on the competitive stability of the industry.

Further, this agency-by-agency, rule-by-rule analysis will create a complex patchwork system whereby different Agencies beholden to different cost-benefit considerations could establish different common identifiers for financial instruments, potentially for entirely different or contradictory reasons. This would thwart the very purpose of the FDTA. Further, individual rulemakings focusing on one form or rule change at a time will result in a myopic view of the economic consequences and will not provide an analysis of whether the choice of FIGI would "threaten the competitive structure" of the market. Therefore, analyzing the economic impact of selecting FIGI as the exclusive financial instrument identifier at this stage is necessary to satisfy the requirements of the APA and the FDTA.

116 CUSIP Survey, *supra* note 52.

Proposed Rule, supra note 2, at 67,895 n.20.

United Steelworkers of Am., AFL-CIO-CLC v. Marshall, 647 F.2d 1189, 1265 (D.C. Cir. 1980).

¹¹⁹ North America's Bldg. Trades Unions v. OSHA, 878 F.3d 271, 296 (D.C. Cir. 2017) (quoting id. at 1265).

¹²⁰ *Id*.

In fact, as demonstrated by the SEC's recent adoption of amendments to Forms N-PORT and N-CEN, the Agencies have not even attempted to assess the costs of choosing common identifiers. Form N-PORT and Form N-CEN Reporting; Guidance on Open-End Fund Liquidity Risk Management Programs, 89 Fed. Reg. 73,764 (Sept. 11, 2024). Specifically, the SEC amended the definition of "LEI" in these forms to require funds to specifically identify whether they are reporting an LEI or an RSSD ID, if available, as the LEI. *Id.* at 73,796. The incongruous reporting requirements amongst different Agencies refute any assertions that the Agencies have holistically considered and selected single common identifiers for financial reporting purposes.

See Preliminary Economic Analysis, supra note 9, at ¶10 ("If adopted as proposed, the Proposed Rule would likely establish the joint data standards as the new economic baseline that the Agencies would use in conducting their own respective feasibility analyses. In so doing, the impact on the market would likely not be fully analyzed. Individual Agencies, would concentrate on any deviations from the proposed joint data standards rather than analyzing the economic impacts of transitioning from current, widely used identifiers to those specified in the

1. The Agencies failed to map common information collections to ascertain where common identifiers are necessary

Increasingly, financial institutions are regulated by more than one of the Agencies and, therefore, are subject to overlapping data collections. Each of the Agencies has its own regulatory mandate and associated reporting requirements, imposing various collection burdens on financial institutions. That has resulted in fragmented data collections and unnecessary cost imposed on reporting institutions. The FDTA was created to address this fragmentation. Instead of each Agency collecting its own set of information, the Agencies can collectively move towards data sharing with the adoption of joint data standards. By identifying overlaps, the Agencies could potentially reduce duplication and improve monitoring in areas of shared interest. Accordingly, prior to publishing the Proposed Rule, the Agencies should have conducted an economic analysis examining the various information collections affected by the Proposed Rule, the identifiers

new standards would instead focus on any deviations from those standards. As a result, the cost assessments would be narrowly focused on the compliance costs associated with amending specific rules, rather than considering the broader implication for the interoperability of the financial market ecosystem.").

According to the Council's 2023 Annual Report, the Agencies "established an interagency working group to perform [an] analysis" to implement the FDTA. See FIN. STABILITY OVERSIGHT COUNCIL, ANNUAL REPORT, at 113 (2023), https://home.treasury.gov/system/files/261/FSOC2023AnnualReport.pdf. The Proposed Rule does not reflect any such analysis. Additionally, this analysis could have been undertaken by leveraging the Interagency Data Inventory—a catalog of data collected by Council's member agencies—which has been maintained and annually updated since 2014. OFR, Interagency Data Inventory (updated June 2024), https://www.financialresearch.gov/data/interagency-data-inventory/. This inventory is the product of the Data Committee of the Council and includes a brief description of the collection, collecting organization and form used to collect the data. While the inventory notes which collections use LEI, it does not have the same analysis for CUSIP or FIGI. https://www.financial.description.gov/data/interagency-data-inventory/. This inventory is the product of the Data Committee of the Council and includes a brief description of the collection, collecting organization and form used to collect the data. While the inventory notes which collections use LEI, it does not have the same analysis for CUSIP or FIGI. https://www.financial.description.gov/data/interagency-data-inventory/. This inventory is the product of the Data Committee of the Council and includes a brief description of the collection, collecting organization and form used to collect the data. While the inventory notes which collections are first the product of the Current statutes, regulations and forms of the Agencies that either (a

A 2017 study by OFR discussed the overlap between SEC and CFTC reporting requirements for large commodity pool operators ("CPOs"), who are required to submit information to the SEC and CFTC through Form PF and also separately to the National Futures Association through Form PQR, which is an abbreviated version of the CFTC Form. The study found that both forms request information on assets under management, but had different definitions of "assets under management," which could require CPOs to calculate separate types of assets under management for reporting on each of the forms. See OFR, ANNUAL REPORT TO CONGRESS 26 (2017), https://www.financialresearch.gov/annual-reports/files/office-of-financial-research-annual-report-2017.pdf. [hereinafter, the "OFR 2017 Annual Report"]. A study by XBRL US found that company financial statement data, collected by the SEC, was also collected by the FDIC, FRB, and Census Bureau through separate reporting requirements. See BETTER DATA FOR BETTER DECISIONS: STANDARDS TO IMPROVE CORPORATE GOVERNMENT REPORTING 5 (Oct. 2011), https://xbrl.us/wp-content/uploads/2011/12/BetterReporting.pdf.

The Agencies have already done this type of exercise with LEI. See OFR 2017 Annual Report, supra note 124, at 29 ("Many financial firms report data to more than one government regulator, and different regulators have different reporting requirements and data identifiers. This lack of uniformity can lead to inefficient, costly, and overlapping requirements for reporting and data management that creates costs for the industry. Estimated costs for industry of managing data without common standards run into the billions of dollars."); see also Inter-Agency Working Grp., Enhancing the Resilience of the U.S. Treasury Market: 2022 Staff Progress Report 10-11 (Nov. 10, 2022), https://home.treasury.gov/system/files/136/2022-IAWG-Treasury-Report.pdf ("In 2022, the IAWG...formed a working group to evaluate the official sector's ability to identify participants' activities across key Treasury data collections" and consider the costs and benefits of improvement options, noting that most working group members expressed a preference for more widespread use of LEIs, which are already required in OFR collections.).

currently used in those collections, how those identifiers are used by market participants, the extent to which those identifiers do not currently meet regulatory reporting needs, what changes market participants would need to make if certain identifiers are selected and the potential impact the adoption of certain identifiers may have on reporting quality.¹²⁶

To achieve this important goal, the Agencies should have considered which current identifiers should be re-used instead of proposing to adopt an identifier they barely use. The unnecessary change would be time-consuming, duplicative and unnecessarily expensive. They should have performed an assessment to identify the impact of any potential solutions and whether such solutions met the policy purpose of the FDTA. This assessment should have considered impact on internal systems, use of data vendor, costs and any required infrastructure changes, to minimize disruption. They should have reached out to impacted market participants to solicit input and a better understanding of their operations, to understand how any potential proposed change would achieve or detract from the FDTA's policy purpose. None of these basic steps which underpin complex regulatory changes were taken.

2. The Agencies failed to consider the cost to market participants to render FIGI useful

The Agencies cannot rely on OpenFIGI as a suitable "free" alternative to the CGS reference data. As an initial matter, the reference data relevant for securities master files is not available on OpenFIGI. OpenFIGI either through the web search function or using the API offers users access to a narrow set of data with at most 13 fields, often less than half of that, that are of limited utility. Those few data fields on their own are not usable because, among other issues, the data fields such as type of security and the exchange code are Bloomberg classifications rather than the widely accepted ISO standards. Similarly, often the ticker field is the ticker used on the Bloomberg

See Preliminary Economic Analysis, *supra* note 9, at ¶33.

See Transe Garland et al., *The Future of Finance: Financial Data Transparency Act of 2022*, DELOITTE (Apr. 11, 2023), at 10, https://www2.deloitte.com/content/dam/Deloitte/us/Documents/public-sector/us-financial-data-transparency-act-pov.pdf.

See, e.g., U.S. Chamber of Commerce, Center for Capital Markets Competitiveness, Investors and the Markets First: Reforms to Restore Confidence in the **SEC** (June 25, 2024), https://www.uschamber.com/assets/documents/CCMC_SEC_Paper_Investors-and-the-markets-first.pdf (stating that "[d]isregarding the interrelatedness of rules is a serious flaw because the cost-benefit analysis fails to account for the actual, real-world impact of an agency's actions on market participants"; "[f]urther compounding the issue is the SEC's failure to undertake the necessary work to understand how markets and participants will be affected by proposed changes, leading to unnecessary and flawed rules that will in some cases disrupt the orderly functioning of the markets"; and "the SEC should engage in a robust process with market participants").

Mapping tables to the MIC available by other services, e.g., InfoReach or Cornell University, are incomplete and do not provide an API to programmatically determine the BBG exchCode to MIC mapping. Bloomberg Exchange Codes Mapping, INFOREACH, https://www.inforeachinc.com/bloomberg-exchange-code-mapping (last visited Oct. 20, 2024); How To: Bloomberg: Cheat Sheets, CORNELL UNIV. LIBR., https://guides.library.cornell.edu/bloomberg_intro/CheatSheets (last visited Oct. 20, 2024). Contrast this with the extensive descriptive information available for the standardized ISO MIC codes. Market Identifier Codes, ISO 10383, https://www.iso20022.org/market-identifier-codes (last visited Oct. 20, 2024). The issue with this Bloomberg-specific exchCode mapping to MIC codes is well known in the industry. See, e.g., Converting

platform and not that used on specific exchanges (e.g., "JPM V0 08/09/28 CD" is the ticker for the security identified as FIGI code BBG004V12R11). A market participant would need alternative data sources to even interpret the information available under an open license. At a minimum a paid data feed would be required and more likely a subscription to a Bloomberg terminal or a subscription to another commercial vendor's data feed would be needed to access the most useful data fields. Although Bloomberg does not publicly disclose the pricing model for Bloomberg terminals, it is generally understood that Bloomberg terminals are on the higher end of such third-party sources. Bloomberg terminals are priced per individual user per annum, which can range approximately from \$20,000 to \$27,660 per year per user. 130

To illustrate the limitations of OpenFIGI, take two different Federal Home Loan Bank bonds: Bond #1 (CUSIP 3130AKLV6; FIGI BBG00YQ0SG28) and Bond #2 (CUSIP 3130AM4F6 and FIGI BBG0101PQ100). Despite being two different bonds with different types (step-up for Bond #1 and fixed for Bond #2), first accrual dates, first coupon dates, and call dates (9/30/2024 at \$100 for Bond #1 and called in full on 7/30/2021 at \$100 for Bond #2), these two bonds appear completely indistinguishable with the limited data fields when searched on OpenFIGI or queried using an API. The results showed identical security names, descriptions, tickers, and security types. Unless the Agencies or the reporting market participants obtain the valuable distinguishing reference data by other means, they would not know which FIGI to use in their records and by extension financial reporting or know what instruments are represented with the open-license FIGI data alone.

Similar reference data issues are present for municipal bonds. For example, Arkansas Craighead County Christian School bonds maturing in 2039 Series A (CUSIP 224222AK5; FIGI BBG00BC73690) and Subordinated Series B (CUSIP 224222AJ8; FIGI BBG00BC73672) display exactly the same data (with the exception of the FIGI code) on OpenFIGI, not differentiating the different series or the subordination of Series B. Nor is it possible to ascertain the step-up coupon rate of 2% until 4/30/2018 and 3% thereafter. In contrast, CGS reference data correctly

Between Bloomberg Exchange Codes and MICs, QUANTITATIVE FINANCE (May 28, 2020), https://quant.stackexchange.com/questions/54477/converting-between-bloomberg-exchange-codes-and-mics.

```
curl 'https://api.openfigi.com/v3/search' \
    --request POST \
    --header 'Content-Type: application/json' \
    --data '{"query":"FHLB","maturity":["2025-12-30","2025-12-30"],"coupon":[1,1]}'
```

On October 8, OpenFIGI changed the ticker for Bond #2 from FHLB 1 12/30/2025 0002 to FHLB 1 12/30/25 000*. The ticker for Bond #1 remains FHLB 1 12/30/2025 0002. However, as noted below, while the ticker provides additional reference data, the lack of uniformity in ticker formats renders the change from "0002" to "000*" in the Bond #2 ticker incomprehensible.

¹³⁰ See Tim Bohen, A Guide to the Cost of a Bloomberg Terminal, STOCKSTOTRADE (Oct. 25, 2023), https://stockstotrade.com/cost-of-bloomberg-terminal/; Bloomberg vs. Capital IQ vs. Factset vs. Refinitiv, WALLSTREETPREP (updated May 1, 2024), https://www.wallstreetprep.com/knowledge/bloomberg-vs-capital-iq-vs-factset-vs-thomson-reuters-eikon/.

OpenFIGI.com (last searched Oct. 7, 2024). The following search was performed in API format:

See also Preliminary Economic Analysis, supra note 9, at ¶53 (providing an example of municipal bonds that cannot be differentiated using the free search functions of OpenFIGI).

distinguish Series A and Subordinated Series B, as well as providing the step-up coupon rates. Similarly, Separate Trading of Registered Interest and Principal of Securities ("STRIPS") are indistinguishable by searching FIGI identifiers with open-license tools because none of the valuable reference data that differentiates STRIPS securities (e.g., issuance date, coupon rate) are available on OpenFIGI.

For some asset classes, the ticker in OpenFIGI may provide additional reference data, but there is no general naming rule or convention for the issue description, which leads to a lack of uniformity in the ticker and renders it unreliable. For example, municipal bonds searched in OpenFIGI return some additional data in the ticker name, but it is unclear what that information is (e.g., issuance date or maturity date) and the format is inconsistent (e.g., series information is inconsistently included or omitted). Equity warrants searched on OpenFIGI often do not have any information encoded in the ticker name, and it is indistinguishable whether the warrant is a call or put warrant other than the indicators "CW" or "PW" sometimes included in the instrument name for such call or put. These are only a few of numerous examples where valuable reference data is left to the imperfect guesswork of the users or API programmers. Other asset classes, such as warrants, also omit valuable reference data like their primary trading exchange. For options, similarly there is no way to assess the primary exchange, nor does it include the OCC (OSI) code required for options clearance. OpenFIGI's lack of readily available and reliable information on the underlying assets renders FIGI and the associated metadata impractical for those asset classes.

FIGI is also not suitable for accurately identifying and tracking securities following corporate actions such as mergers. For example, in March 2024, Community West Bancshares merged with Central Valley Community Bancorp. The merged enterprise issues shares as Community West Bancshares with the symbol CWBC. The merged enterprise operates under CUSIP 203937107 and ticker CWBC, while the original, pre-merger ticker for Central Valley Community Bancorp was CVCY and its original CUSIP was 155685100. In contrast, there is no way to distinguish FIGI identifiers for the pre-merger Central Valley Community Bancorp and the post-merger merged Community West Bancshares. A search of the pre-merger and post-merger CUSIPs in OpenFIGI returns substantially similar results (*e.g.*, FIGI BBG00L44ML09 appears in both searches), and there is no way, based on the data available on OpenFIGI, to distinguish between the pre-merger and post-merger securities, which is a deliberate feature of the FIGI identifier design in order to have an identifier with permanence.¹³³

The Agencies' basis for exclusively establishing FIGI is that FIGI is non-proprietary and available for free under an open license and, accordingly, the costs of FIGI on market participants is necessarily an "important aspect of the problem." Yet, the burdens and costs on market participants are something the Agencies "entirely failed to consider" and as a result the Agencies cannot articulate a "rational connection between the facts found and the choice made." ¹³⁵

See Allocation Rules, supra note 103, at 18.

¹³⁴ State Farm, 463 U.S. at 43.

¹³⁵ *Id*.

3. Agencies did not consider the cost and disruptive impact of changing the existing operational infrastructure of market participants, which heavily relies on CUSIP, to incorporate FIGI

Based on the flawed premise that the impact of the Proposed Rule is limited to regulatory reporting, the Agencies did not take into account that reporting systems are generally not separate systems. If this aspect had been considered, it would have been obvious to the Agencies that many market participants keep securities master files that link to hundreds of systems and are used for regulatory reporting as well as a myriad of other functions, including trading, clearance and settlement. The Proposed Rule does not account for how data is stored, updated and extracted for different functions, including regulatory reporting.

Establishing FIGI as the exclusive common financial instrument identifier will require a major update and transition in the way market participants link data in their systems, an extensive and expensive undertaking without apparent value. The Agencies either did not conduct sufficient due diligence to understand how data is stored and used by market participants or they mistakenly concluded that financial reporting can be artificially segmented from clearance, trading and settlement, among other functions.

Even assuming that it would be possible and appropriate to segment financial reporting from other functions, as currently constructed, FIGI, its associated reference data, and access methods for the underlying data are not fit for purpose. FIGI's lack of fungibility makes it unclear how market participants could use FIGI in their securities master files and how they could maintain and update those files. The Agencies, by introducing an overly complex and relatively new identifier could recreate the exact problem that lead to the creation of CUSIP over 60 years ago. These inaccuracies would have a disruptive impact on market participants' ability to engage in transactions involving multiple steps and multiple organizations (*e.g.*, seller, buyer, broker, exchange, clearing house) in which the instrument identifier must be recognized by and match at *all* entities involved in the trade. Market participants would not be able to net trades, DTC would not be able to hold securities in "book entry" form, and there would be an increase in settlement risk.

¹³⁶ See Preliminary Economic Analysis, supra note 9, at ¶48.

¹³⁷ See Appendix E, which compares the key features of CUSIP with FIGI.

¹³⁸ See Preliminary Economic Analysis, supra note 9, at ¶56-57; see also 13F Analysis, supra note 9, at 4-6.

Jay R. Ritter & Phillip Wool, *Anatomy of a World-Class Standards Body: The Origins and Future of the CUSIP System*, at 3 (Jan. 2021), https://site.warrington.ufl.edu/ritter/files/CUSIP-Ritter-Wool.pdf ("There have been proposals that seek to introduce competing identification standards into the process. This is alarming because any proposal to adopt an overlapping instrument identifier is a move backwards to a bad history of multiple standards that do little more than consume valuable resources and drive up costs – including the cost in matching, merging, and utilizing data from multiple sources using different standards. Ultimately, the confusion introduced by a proliferation of identifiers increases risks for all market participants. And the market agrees. As part of that same customer survey for the ABA, almost 80% of the industry indicated that there was absolutely no appetite for an additional identifier within their institution.").

Any unilateral change from CUSIP to FIGI would at the very least require massive interidentifier mapping, i.e., an exercise of linking FIGI to CUSIP identifiers, and it is not clear this is even possible at all given that CUSIP and FIGI are not readily interchangeable, FIGI is not fungible, and FIGI is not available on a timely basis. 140 As described above, market participants collect data from multiple data sources and data models that link to hundreds of systems that use instrument-level information for various functions such as trade confirmation, settlement, valuation and reporting. 141 In practice, an update to FIGI would mean that market participants would need to fully integrate FIGIs into their existing securities master files, not just as a data point but as the financial instrument-level identifier that links multiple data sources and systems. To provide an illustration of the scope of the effort, market participants have dozens of source systems, data warehouses, risk analytics systems and reference data management repositories that would need to be updated. 142 To do this, firms would need to review inventory, conduct an impact analysis, detail the necessary specification changes to each system and use case, update APIs, and ensure that there was a golden source to verify the new data mapping. Firms would need to test the mapping before going live to ensure that the mapping worked in every instance.¹⁴³ This is not possible without significant costs and error risk. According to the 13F Analysis, none of the 10 largest institutional managers, as measured by the average size of holdings reported in Form 13F filings, included a FIGI in their filings during the Sample Period. Among the smallest 1,000 institutional managers, only 4.3% included a FIGI in their Form 13F filings, and this figure drops to less than 1% for the smallest 500 filers. 146 The relatively low and plateaued share of asset managers already including FIGI in their 13F filings suggests that, for both large and small asset managers, any change from CUSIP to FIGI for reporting would impose significant costs to market participants regardless of the size of the institution. The Proposed Rule does not analyze any of these costs, which are an important aspect of the problem.

Finally, the API function on OpenFIGI is not fit for the task. To map such data, it would involve a time-consuming process due to the data limitations and it would not result in the

While the proposed rule cites to real-time availability as one of the benefits of FIGI, that is not the case of newly issued financial instruments. OpenFIGI does not provide identifiers, and the accompanying limited data, for newly issued financial instruments on a timely basis. For example, in the case of a new bond offering for Collin County Community College District Consolidated Fund Revenue Bonds, Series 2024 (CUSIP 194742FS6) that was issued on October 16, 2024, at 12:10 p.m., CGS published a CUSIP for the bond 5 minutes after at 12:15 p.m. As of October 21, 2024 at 9:00 a.m., this new issuance has yet to be published on OpenFIGI. See search results of Collin County Community College District Consolidated Fund Revenue Bonds, Series 2024 (CUSIP: 194742FS6) on OpenFIGI, OpenFIGI, https://www.openfigi.com/search#!?simpleSearchString=914742FS6 (last visited Oct. 21, 2024, 9:00 a.m.); see also Appendix D, which includes screenshots of a search of the Collin County bond on OpenFIGI returning no results.

¹⁴¹ *Id.* at 4.

¹⁴² *Id.* at 5.

¹⁴³ *Id*.

See Preliminary Economic Analysis, supra note 9, at ¶48.

^{145 13}F Analysis, *supra* note 9, at 4.

¹⁴⁶ *Id*.

reference data needed.¹⁴⁷ Firms would likely need to hire a third-party vendor to do the task and the result would be securities master files with inconsistent financial instrument identifiers, which will hinder firms' ability to monitor customer and positions, net obligations internally to reduce risk, ensure timely settlement, and have accurate books and records, and the whole process by which firms use those files would be jeopardized.

It is clear that the Agencies did no work to justify imposing these costs and risks on market participants and the market as a whole and thus the Proposed Rule is so "implausible that it [cannot] be ascribed to a difference in view or the product of agency expertise." The Agencies point to no functional shortcomings in the *status quo* that would necessitate such a fundamental structural change and failed to consider any costs that would be imposed on market participants and the market as a whole.

4. The Agencies did not consider global reporting fragmentation would result from the exclusive designation of FIGI

The Agencies also did not consider the impact designating FIGI alone would have on regulatory reporting globally. Specifically, regulatory reporting requirements outside the U.S. require the use of ISIN.¹⁴⁹ Non-U.S. regulators also use ISIN to monitor risk.¹⁵⁰ Requiring FIGI exclusively would hamper global efforts to harmonize regulatory reporting and monitor systemic risk as any reporting would become fragmented.¹⁵¹

In fact, using the API function on OpenFIGI to map 22,000 securities took several hours and suffered from numerous errors with the API. This mapping would not be a one-time exercise as it would need to be continually done to ensure that the securities master files contain the current information regarding new issuances and corporate events, among others.

¹⁴⁸ State Farm, 463 U.S. at 43.

¹⁴⁹ See MiFIR Reporting Instructions, supra note 21.

For example, when ESMA published results of its annual transparency calculations for non-equity instruments and its quarterly liquidity assessment for bonds, its analysis was by financial instrument as identified by ISIN. See ESMA publishes the annual transparency calculations for non-equity instruments, bond liquidity data and quarterly SI calculations, ESMA (Apr. 30, 2024), https://www.esma.europa.eu/press-news/esma-news/esma-publishes-annual-transparency-calculations-non-equity-instruments-bond-0.

See, e.g., Harmonisation of Critical OTC Derivatives Data Elements (Other Than UTI and UPI) – Technical Guidance, FIN. STABILITY BD. (Apr. 9, 2018), https://www.fsb.org/2018/04/harmonisation-of-critical-otc-derivatives-data-elements-other-than-uti-and-upi-technical-guidance ("The G20 leaders agreed in 2009 that all over-the-counter (OTC) derivatives transactions should be reported to trade repositories (TRs) to further the goals of improving transparency, mitigating systemic risk and preventing market abuse. Aggregation of data being reported across TRs will help authorities to obtain a comprehensive view of the OTC derivatives markets and its activity."); see also Feasibility Study on Approaches to Aggregate OTC Derivative Data, FIN. STABILITY BD. (Sept. 19, 2014), at 3, https://www.fsb.org/uploads/r-140919.pdf ("The requirements for trade reporting differ across jurisdictions and TRs differ in their practices. The result is that TR data are fragmented across many locations, stored in a variety of formats, and subject to many different rules for authorities' access.").

5. FIGI is not capable of replicating CUSIP and establishing FIGI exclusively would have obvious harmful impacts not considered by the Agencies

The Proposed Rule also incorrectly implies that FIGI's role is interchangeable with CUSIP.

FIGI is a relatively new identifier that fails the FDTA's general factor that the standard be developed and maintained by a voluntary consensus standards body. Unlike CUSIP's 60-year track record serving the markets and the rigorous process by which it was developed, in partnership with market participants to provide solutions to trading, clearance and settlement, FIGI is a relatively new entrant in the world of identifiers. FIGI was developed by Bloomberg and first called Bloomberg Global ID ("BBGID"). In 2014, Bloomberg renamed its BBGID FIGI¹⁵³ and two years later it launched OpenFIGI and the OpenFIGI API. The Object Management Group ("OMG") adopted FIGI as a technical standard in 2015. While the Accredited Standards Committee ("ASC") X9, the body that recognized and continues to reapprove CUSIP, is dedicated to the U.S. financial services industry, OMG is a technical standards-setting organization that covers a variety of industries such as agriculture. autonomous vehicles, energy, healthcare, military, retail, telecommunications and space. 154 Its mission is to foster common technology interests, unlike ASC X9 whose mission is to support the financial services industry by creating and maintaining U.S. and international standards that improve payments and securities transactions, protect data and facilitate information exchange. 155 This mission is reflected in ASC X9's membership and leadership, which span the financial services industry. 156 This stands in contrast with OMG.¹⁵⁷ Importantly, FIGI, unlike CUSIP, was developed by Bloomberg rather than through the input of relevant market participants. Although OMG adopted FIGI in 2015, it did not develop FIGI. Treating FIGI as an identifier "established" by the OMG as stated by the Agencies neglects to account for Bloomberg's unilateral development of FIGI and its continued role, through OMG and otherwise, in the maintenance of FIGI. Moreover, FIGI is not accredited by ISO, the most widely respected consensus standards body globally and which also developed LEI and other standards included in the Proposed Rule. FIGI's development stands in stark contrast with CUSIP, which was developed in partnership with market participants and has been accredited by a voluntary consensus standards body for

See Appendix E, which compares the key features of CUSIP with FIGI.

What's in a Name? The Bloomberg Global ID is Reborn as FIGI, BLOOMBERG (Oct. 9, 2014), https://www.bloomberg.com/company/press/whats-name-bloomberg-global-id-reborn-figi/; see OpenFIGI API—V3—idType Values, OPENFIGI, https://www.openfigi.com/api#v3-idType-values (last visited Oct. 17, 2024) (the FIGI value is ID BB Global).

¹⁵⁴ Mission & Vision, OMG, https://www.omg.org/about/ (last visited Oct. 16, 2024).

Mission and Objectives, ASC X9, https://x9.org/missions-and-objectives/ (last visited Oct. 16, 2024).

¹⁵⁶ ASC X9 Leadership, ASC X9, https://x9.org/asc-x9-leadership/ (last visited Oct. 16, 2024).

¹⁵⁷ Board of Directors, OMG, https://www.omg.org/board-of-directors.htm (last visited Oct. 16, 2024).

decades. 158 Therefore, FIGI does not meet the FDTA's general factor that it be developed and maintained by a voluntary consensus standards body.

The Agencies failed to consider that FIGI is not an identifier of significance for key asset classes. FIGI is not used in capital market operations for all classes of financial instruments. While the Proposed Rule noted FIGI's usability for "asset classes that do not normally have a global identifier, including loans," that is not accurate. The conclusion has been repudiated by the loan industry itself. The LSTA, following the issuance of the Proposed Rule, emphasized that requiring FIGI to the exclusion of CUSIPs would be especially problematic for corporate loan market transactions, which rely on CUSIPs for booking trades into the electronic settlement system and filing Shared National Credit Reports, and that FIGI is not used in any capacity in the corporate loan market. Further, it is ISIN (which is linked to CUSIP as discussed above), not FIGI, that is used in the global bond markets, which is issued by Euroclear. Here, as with other aspects of the Proposed Rule, the Agencies came to a conclusion that is not grounded in facts.

Agencies did not consider their own experience with requiring FIGI in financial reporting. The limited use and non-fungibility of FIGI is known to the Agencies. As regulators, the Agencies have access to data that would enable them to analyze whether the establishment of FIGI meets the FDTA's general factor that the standard be "consistent with, and implement applicable accounting and reporting principles." The Proposed Rule did not consider this data. Specifically, the SEC has permitted the optional reporting of FIGI, or required (in one instance) FIGI reporting only if a FIGI code has been assigned, in a limited set of SEC forms through rulemakings beginning in 2022. However, in the Proposed Rule, the Agencies did not assess this FIGI usage data available to them. As noted above, market participants' reporting of FIGI has shown that the use of FIGI is limited, reflecting lack of market adoption, and riddled with

See supra note 18 and accompanying text.

Proposed Rule, *supra* note 2, at 67,897 (alleging that FIGI "is an international identifier for all classes of financial instruments, including, but not limited to, securities and digital assets.").

Proposed Rule, *supra* note 2, at 67,897. The Proposed Rule also noted that "[t]he FIGI has been implemented as a U.S. standard (X9.145) by the ANSI Accredited Standards Committee X9 organization." *Id.*

See Ellen Hefferan, Federal Agencies Propose Data Standards Rule Under FDTA, Loan Syndication & Trading Association (Aug. 15, 2024), https://www.lsta.org/news-resources/federal-agencies-propose-data-standards-rule-under-fdta/.

Euroclear, ISIN, https://www.isin.com/euroclear/ (last visited Oct. 16, 2024).

¹⁶³ 12 U.S.C. § 5334(c)(1)(B)(vi).

Electronic Submission of Applications for Orders Under the Advisers Act and the Investment Company Act, Confidential Treatment Requests for Filings on Form 13F, and Form ADV-NR; Amendments to Form 13F, 87 Fed. Reg. 38,943 (June 30, 2022) (amendments to Form 13F permitting optional reporting of FIGI becoming effective January 3, 2023); Short Position and Short Activity Reporting by Institutional Investment Managers, 88 Fed. Reg. 75,100 (Nov. 1, 2023) (requiring reporting of FIGI only if a FIGI has been assigned); Reporting of Securities Loans, 88 Fed. Reg. 75,644 (Nov. 3, 2023); Form PF; Reporting Requirements for All Filers and Large Hedge Fund Advisers, 89 Fed. Reg. 17,984 (Mar. 12, 2024).

This is not surprising because even though the SEC, for example, permits optional reporting of FIGI for Form 13F, its own official list of Section 13(f) Securities only lists the CUSIP. See SEC, LIST OF SECTION 13F SECURITIES: SECOND QUARTER FY 2024 (2024), sec_gov/files/investment/13flist2024q2.pdf.

errors.¹⁶⁶ This data makes it abundantly clear that requiring FIGI as the financial instruments identifier would hinder Agencies' efforts to aggregate and share data. It provides no basis for the Proposed Rule to establish that the exclusive selection of FIGI would promote interoperability of data sharing between them.¹⁶⁷ In the Proposed Rule, the Agencies would also have needed to consider the economic impact, including the costs and benefits, of a potential decline in the quality of the reported data due to inconsistent reporting of FIGIs resulting from selecting FIGI as a common identifier for reporting.¹⁶⁸

Further, the Proposed Rule did not mention that the SEC and CFTC affirmatively rejected FIGI less than five months before issuing the Proposed Rule. In adopting amendments to Form PF in 2024, the SEC and CFTC stated that "a fungible identifier [as in CUSIP] is preferable because *it will allow for more consistent reporting of assets than a nonfungible identifier* regardless of the venue of execution, resulting in more effective monitoring and assessment of system risk," and that they "are not adopting a change to permit the substitution of FIGI for CUSIP." Thus, the Agencies themselves have understood that one security being represented by multiple FIGIs leads to a higher risk of inconsistent reporting and accordingly determined that fungibility is critical for ensuring transparent reporting and monitoring and assessing systemic risk. Establishing a non-fungible identifier such as FIGI as the exclusive financial instruments identifier in the Proposed Rule stands at complete odds with the recent amendments to Form PF.

Proposing such a change that is "materially different" from prior rules adopted by the Agencies without any explanation is the "hallmark of 'an arbitrary and capricious change from agency practice." Importantly, it also fails another of the FDTA's general factors that the standard be consistent with, and implement applicable accounting and reporting principles due to its lack of fungibility. ¹⁷²

¹⁶⁶ See supra § III.B.

See Chamber of Com. v. S.E.C., 85 F.4th 760, 776 (5th Cir. 2023) (stating that the SEC, in response to petitioners' identification of readily available data sources including disclosures to the SEC, "failed to demonstrate that its conclusion that the proposed rule promotes efficiency, competition, and capital formation is the product of reasoned decision making" (internal citations omitted)).

¹⁶⁸ See Preliminary Economic Analysis, supra note 9, at ¶53-55.

Form PF Adopting Release, *supra* note 94 at 18,019, 17,985 (emphasis added) (stating that the purpose of Form PF is to provide the Agencies "with important information about basic operations and strategies of private funds and has helped establish a baseline picture of the private fund industry for use in assessing systemic risk").

¹⁷⁰ In promulgating this rule, the SEC and CFTC also "consulted with [the Council] to gain input on these amendments to help ensure that Form PF constitutes to provide [the Council] with information it can use to assess systemic risk." *Id.* at 17,987.

Data Mktg. P'ship, LP v. U.S. Dep't of Lab., 45 F.4th 846, 857 (5th Cir. 2022); see also Encino Motorcars, LLC v. Navarro, 579 U.S. 211, 222 (2016).

¹⁷² 12 U.S.C. § 5334(c)(1)(B)(vi).

D. The Proposed Rule failed to consider the dependency of FIGI on Bloomberg when concluding without analysis that FIGI was nonproprietary and available under an open license

The Agencies have proposed to establish FIGI as the exclusive common financial instruments identifier because CUSIP and ISIN "are proprietary and not available under open license," while FIGI supposedly meets these requirements. The Proposed Rule failed to assess the role of Bloomberg with respect to the development and maintenance of FIGI. The Agencies, in the Proposed Rule, incorrectly state that FIGI was established by OMG, "an openmembership [technology] standards consortium." As noted above, FIGI was created and continues to be developed by Bloomberg, a privately held data and financial solutions firm.

technical identifiers. It repackaged its Bloomberg BBGID, originally used with Bloomberg terminals, into "FIGI" in 2014. FIGI, like its predecessor, is based on Bloomberg's Open Symbology system for identifying financial instruments, which was initially released as part of Bloomberg's Open Market Data Initiative in 2009. 175 FIGI depended on and continues to depend on Bloomberg intellectual property and information technology. 176 Bloomberg assigned its rights and interests in FIGI to the OMG in order to gain recognition as a standard identifier. The OMG subsequently deemed FIGI an official standard in 2015. 177 However, Bloomberg's involvement in FIGI did not cease, rather it became the official "Registration Authority" and "Certified Provider" for FIGI and, in fact, issues all FIGIs except for crypto assets. 178 Bloomberg further entrenched itself when it launched OpenFIGI.com, a free database that purports to provide the reference data associated with a FIGI. 179 Although FIGI is ostensibly available under an open license, users only have access to a narrow set of data through OpenFIGI because Bloomberg dedicated only the FIGI identifier itself (but not any reference data) to the public domain. 180 Bloomberg itself admits that the name change to FIGI was simply a marketing move to increase

Proposed Rule, *supra* note 2, at 67,897; *see also supra* Section II discussing the requirement in Section 5334(c)(1)(A) of the FDTA.

¹⁷⁴ Id.

What's in a Name?, supra note 153.

In a press announcement, Bloomberg noted that "[t]he methodology behind the FIGI is based on Bloomberg's Open Symbology, or BSYM,... [which] provides a library of 200 million unique identifiers, called BBDIGs." What's in a Name?, supra note 153.

Proposed Rule, *supra* note 2, at 67,897.

¹⁷⁸ See Allocation Rules, supra note 103, at 2.

Bloomberg Launches Online Request Utility and New Mapping Tools for the Financial Instrument Global Identifier (FIGI), BLOOMBERG (Jan. 20, 2016), https://www.bloomberg.com/company/press/bloomberg-launches-online-request-utility-and-new-mapping-tools-for-the-financial-instrument-global-identifier-figi/.

See Terms of Service, OPENFIGI (last updated Nov. 27, 2018), https://www.openfigi.com/docs/terms-of-service ("Bloomberg Finance L.P.... hereby dedicates FIGI Identifiers to the public domain and makes FIGI Identifiers available to the public at large for free.").

the appearance of neutrality. ¹⁸¹ Bloomberg has continued to include FIGI as part of its recent product launches noting that FIGI and BBGID are used as loan identifiers "resulting in enhanced interoperability with Bloomberg's loan reference data and streamlined trade workflows." ¹⁸² While the FIGI identifier itself may be technically non-proprietary, the Proposed Rule should have analyzed whether FIGI's relationship with Bloomberg in fact meets the goals of the FDTA.

The data provided by OpenFIGI is limited. OpenFIGI – the open license-system that makes FIGIs and identification of financial instruments publicly available – and the OpenFIGI API are not all-encompassing. OpenFIGI either through the website or API mapping offers only 13 fields with limited utility for free, three of which are FIGIs, three that represent the type of security (using Bloomberg's proprietary textual classification of "Equity," "Index," "Commercial Paper," etc., instead of using the widely adopted ISO standardized Classification of Financial Instruments), the Bloomberg ticker symbol, the Bloomberg exchange code (instead of the widely accepted ISO standardized MICs), a short description that with few exceptions is a copy of the Bloomberg ticker symbol, and the name of the security that sometimes but not always represents the issuer of the security (instead of the ISO standardized Financial Instrument Short Name). Additionally, while OpenFIGI allows for API mapping (and by signing up for an institutional account, you can receive data at a higher rate), the data fields available under an open-license remain the same and the amount of data that a user can download continues to be limited. 183 The most useful reference data that would in fact provide the unique characteristics of the financial instrument are only available to users with a paid subscription to more complete reference data as accessible with a Bloomberg terminal or a subscription to another commercial vendor's data feed. 184

IV. Conclusion

For the reasons outlined in this submission, we respectfully request that the Agencies either issue a revised Notice of Proposed Rulemaking that complies with the APA or remove FIGI from

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[&]quot;Now that the OMG has adopted FIGI as a standard, the BBGID is now known as the FIGI, but the way the system works and its benefit to the marketplace is the same. Stripping the BBGID of the Bloomberg name allows for a neutral, generic standard that avoids the branding issue." *What's in a Name?*, *supra* note 153.

BLOOMBERG, Bloomberg Accelerates Its Presence in Loans Market with Launch of a New Leveraged Loan Index Based on New Syndicated Loans Data and Pricing Solution, PR NEWSWIRE (Oct. 15, 2024), https://www.prnewswire.com/news-releases/bloomberg-accelerates-its-presence-in-loans-market-with-launch-of-a-new-leveraged-loan-index-based-on-new-syndicated-loans-data-and-pricing-solution-302276199.html.

See OpenFIGIAPI, OPENFIGI, https://www.openfigi.com/api (last visited Oct. 17, 2024) (noting that for mapping API without an API key, a user is limited to 25 requests per minute and 10 jobs per request and with an API key, a user is limited to 25 requests per six seconds and 100 jobs per request and for search/filter API, without an API key, a user is limited to five requests per minute with maximum results of 15,000 and with an API key, a user is limited to 20 requests per minute with a maximum of 15,000 results).

Provision and maintenance of quality data incurs comes with a cost. Also, there is no guarantee that even services like OpenFIGI will remain free. Such course is not uncommon, as seen in OpenAI—which initially started with offering open license-services—no longer offering free OpenAI APIs and recently announcing that OpenAI will become a for-profit company. See Deepa Seetharaman, Berber Jin & Tom Dotan, OpenAI to Become For-Profit Company, WALL ST. J. (Sept. 25, 2024), https://www.wsj.com/tech/ai/openai-chief-technology-officer-resigns-7a8b4639?mod=djemalertNEWS.

the final rule. Any other path would risk saddling each individual Agency with the task of either promulgating potentially costly and disruptive proposals or spending unnecessary resources explaining why it would not follow any final standards. The FDTA does not provide the Agencies with a statutory mandate to push the market toward an unnecessary, disruptive and costly change.

Finally, while the ABA's comments today are focused on the Agencies' decision to disruptively establish FIGI as the exclusive financial instrument identifier for reporting to and between the Agencies, by going beyond the FDTA's mandate without any meaningful analysis or due consideration, the Agencies' comments are not limited to FIGI. Indeed, the Agencies failed to adequately consider the economic impacts and costs of every common identifier selected in the Proposed Rule, which was necessary to meet the Agencies' obligations under the APA and the FDTA.

If you have any questions, please contact the undersigned.

Respectfully,

TOB NICHOUS

Rob Nichols President and CEO American Bankers Association

Thomas Pinder General Counsel

American Bankers Association

APPENDIX A

Agency Rules, Regulations and Forms Referencing CUSIP¹

FORMS

	Agency / Subdivision or Bureau	Form Form Title			
1.	SEC	Form 1-A	Regulation A Offering Statement		
2.	SEC	Form 12b-25	Notification of Late Filing		
3.	SEC	Form 13F	Information required of institutional investment managers pursuant to Section 13(f)		
4.	SEC	Form 144	Notice of proposed sale of securities pursuant to Rule 144		
5.	SEC	Form CB	Tender offer/rights offering notification form		
6.	SEC	Form N-CEN	Annual Report for Registered Investment Companies		
7.	SEC	Form N-CR	Current Report, Money Market Fund Material Events		
8.	SEC	Form N-CSR	Certified shareholder report of registered management investment companies		
9.	SEC	Form N-MFP Monthly Schedule of Portfolio Holdings of Money Market Fund			
10.	SEC	Form N-PORT	Monthly Portfolio Investments Report		
11.	SEC	Form N-PX	Annual Report of Proxy Voting Record of Registered Management Investment Company		
12.	SEC	Form N-RN	Current Report for Registered Management Investment Companies and Business Development Companies		
13.	SEC	Form NR SRO	Application for Registration as a Nationally Recognized Statistical Rating Organization (NRSRO)		
14.	SEC, CFTC	Form PF	Reporting Form for Investment Advisers to Private Funds and Certain		

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Appendix A lists out all of the current statutes, regulations and forms of the Agencies that either (a) require reporting a CUSIP to identify financial instruments or (b) reference CUSIP in its instructions or notes. The Forms section of this Appendix A was created based on a review of the reporting forms available on the applicable agency's website and reginfo.gov.

	Agency / Subdivision or Bureau	Form	Form Title
			Commodity Pool Operators and Commodity Trading Advisors
15.	SEC, FDIC	Form TA-2	Form for reporting activities of transfer agents
16.	SEC	Form TCR	Tip, Complaint, or Referral
17.	SEC	Form X-17F-1A	Missing/Lost/Stolen/Counterfeit Securities Report
18.	SEC	Schedule 13D	Information to be included in statements filed pursuant to § 240.13d-1(a) and amendments thereto filed pursuant to § 240.13d-2(a)
19.	SEC	Schedule 13G	Information to be included in statements filed pursuant to § 240.13d-1(b), (c), and (d) and amendments thereto filed pursuant to § 240.13d-2
20.	SEC	Schedule 13E-3	Schedule 13E-3, Transaction statement under section 13(e) of the Securities Exchange Act of 1934 and Rule 13e-3
21.	SEC	Schedule 13E-4F	Schedule 13E-4F. Tender offer statement pursuant to section 13(e) (1) of the Securities Exchange Act of 1934 and § 240.13e-4 thereunder
22.	SEC	Schedule TO	Schedule TO. Tender offer statement under section 14(d)(1) or 13(e)(1) of the Securities Exchange Act of 1934
23.	SEC	Schedule 14D-1F	Schedule 14D-1F. Tender offer statement pursuant to rule 14d-1(b) under the Securities Exchange Act of 1934
24.	SEC	Schedule 14D-9	Schedule 14D-9
25.	SEC	Schedule 14D-9F	Solicitation/recommendation statement pursuant to section 14(d)(4) of the Securities Exchange Act of 1934 and rules 14d-1(b) and 14e-2(c) thereunder
26.	SEC	Schedule 14N	Information to be included in statements filed pursuant to § 240.14n-1 and amendments thereto filed pursuant to § 240.14n-2
27.	CFTC	Guidebook for Part 17.00	Reports by Reporting Markets, Future Commission Merchants, Clearing Members, and Foreign Brokers

	Agency / Subdivision or Bureau	Form	Form Title		
28.	FRB, OCC, FDIC	FFIEC 031 Consolidated Reports of Conditi Income for a Bank with Domesti Foreign Offices			
29.	FRB, OCC, FDIC	FFIEC 041	Consolidated Reports of Condition and Income for a Bank with Domestic Offices Only		
30.	FRB, OCC, FDIC	FFIEC 051	Consolidated Reports of Condition and Income for a Bank with Domestic Offices Only and Total Assets Less than \$5 Billion		
31.	FRB	FFIEC 002	Report of Assets and Liabilities of U.S. Branches and Agencies of Foreign Banks		
32.	FRB, OCC, FDIC	FFIEC 009	Country Exposure Report		
33.	FRB, OCC, FDIC	FFIEC 009a	Country Exposure Information Report		
34.	FRB, OCC, FDIC	FFIEC 019	Country Exposure Report for U.S. Branches and Agencies of Foreign Banks		
35.	FRB	FR Q-1	Capital Requirements for Board- Regulated Institutions Significantly Engaged in Insurance Activities		
36.	FRB	FR Y-10	Report of Changes in Organizational Structure		
37.	FRB	FR Y-14Q	Capital Assessments and Stress Testing		
38.	Treasury	FS Form 1050	Creditor's Request for Payment of Treasury Securities Belonging to a Decedent's Estate Being Settled Without Administration		
39.	Treasury	FS Form 1455	Request by Fiduciary for Distribution of United States Treasury Securities		
40.	Treasury	FS Form 1849	Disclaimer and Consent with Respect to United States Treasury Securities		
41.	Treasury	FS Form 2243	Supplemental Statement for United States Securities		
42.	Treasury	FS Form 5394	Agreement and Request for Disposition of a Decedent's Treasury Securities		
43.	Treasury	FS Form 5446	TreasuryDirect® Offline Transaction Request		
44.	Treasury	FS Form 5511	TreasuryDirect® Transfer Request		

	Agency / Subdivision or Bureau	Form	Form Title		
45.	Treasury	FS Form 1832	Special Form of Assignment for U.S. Registered Definitive Securities		
46.	Treasury	FS Form 5179	Security Transfer Request		
47.	Treasury	FS Form 5336	Disposition of Treasury Securities Belonging to a Decedent's Estate Being Settled Without Administration		
48.	Treasury	FS 5367	Investing Directly with the U.S. Treasury		
49.	Treasury	FS 4144	FHA Debenture Transfer Request		
50.	Treasury	FS 5237	Subscription for Purchase and Issue of U.S. Treasury Securities		
51.	Treasury	Form SHC/SHCA	Mandatory Annual Report to the Federal Reserve Bank of New York: Report of U.S. Ownership of Foreign Securities, Including Selected Money Market Instruments (SCHA)		
52.	Treasury	Form SHL/SHLA	Report of Foreign Holdings of U.S. Securities, Including Selected Money Market Instruments		
53.	Treasury / Alcohol and Tobacco Tax and Trade Bureau ("TTB")	TTB F 5110.56	Distilled Spirits Bond		
54.	Treasury / TTB	TTB F 5120.36	Wine Bond		
55.	Treasury / TTB	TTB F 5200.25	Tobacco Bond – Collateral		
56.	Treasury / TTB	TTB F 5200.29	Tobacco Bond		
57.	Treasury / TTB	TTB F 5100.30	Continuing Export Bond for Distilled Spirits and Wine		
58.	Department of the Treasury / Financial Crimes Enforcement Network ("FinCEN")	FinCen 111	FinCEN Suspicious Activity Report		
59.	OCC	Monthly Schedule of Short-Term Investment Funds			

	Agency / Subdivision or Bureau	Form	Form Title
60.	FHFA / Fannie Mae	Form 2014	Guaranteed Mortgage-Backed Securities Program—Delivery Schedule
61.	NCUA	NCUA Supervisory Stress Test: Annual Data Request Instructions (Jan. 2024)	

Laws, Rules & Regulations

	Agency / Subdivision or Bureau	Law, Rule or Regulation	Title
		STATUTES	
1.	SEC	15 USC § 78m	Periodical and Other Reports
		REGULATIO	NS
2.	SEC	17 CFR § 240.17Ad-19	Requirements for Cancellation, Processing, Storage, Transportation, and Destruction or Other Disposition of Securities Certificates
3.	SEC	17 CFR § 275.204A-1	Investment Adviser Codes of Ethics
4.	SEC	17 CFR § 240.15c3-3	Customer Protection – Reserves and Custody of Securities
5.	SEC	17 CFR § 270.6c-11	Exchange-Traded Funds
6.	SEC	17 CFR § 240.13d-102	Schedule 13G – Information to Be Included in Statements Filed Pursuant to § 240.13d-1(b), (c), and (d) and Amendments Thereto Filed Pursuant to § 240.13d-2.
7.	SEC	17 CFR § 240.17Ad-16	Notice of Assumption or Termination of Transfer Agent Services
8.	SEC	17 CFR § 240.17f-1	Requirements for Reporting and Injury with Respect to Missing, Lost, Counterfeit or Stolen Securities
9.	SEC	17 CFR § 240.14n-101	Schedule 14N – Information to Be Included in Statements Filed Pursuant to § 240.14n-1 and Amendments Thereto Filed Pursuant to § 240.14n-2
10.	SEC	17 CFR § 240.13d-101	Schedule 13D – Information to Be Included in Statements Filed Pursuant to § 240.13d-1(a) and Amendments Thereto Filed Pursuant to § 240.13d-2(a)
11.	SEC	17 CFR § 230.172	Delivery of Prospectuses
12.	SEC	17 CFR § 230.134	Communications Not Deemed a Prospectus
13.	SEC	17 CFR § 240.14d-101	Schedule 14D-9
14.	SEC	17 CFR § 240.14d-103	Schedule 14D-9F. Solicitation/Recommendation Statement Pursuant to Section 14(d)(4) of the Securities Exchange Act of 1934

	Agency / Subdivision or Bureau	Law, Rule or Regulation	Title
15.	SEC	17 CFR § 240.14d-102	and Rules 14d-1(b) and 14d-2(c) Thereunder Schedule 14D-1F. Tender Offer Statement Pursuant to Rule 14d-1(b) under the Securities Exchange Act of
16.	SEC	17 CFR § 240.17g-2	1934 Records to Be Made and Retained by Nationally Recognized Statistical
17. 18.	SEC SEC	17 CFR § 240.10c-1a 17 CFR § 240.13e-102	Rating Organizations Securities Lending Transparency Schedule 13E-4F. Tender Offer Statement Pursuant to Section 13(e)(1)
19.	SEC	17 CFR § 270.2a-7	of the Securities Exchange Act of 1934 and § 240.13e-4 Thereunder Money Market Funds
20.	SEC	17 CFR § 240.13e-100	Schedule 13E-3, Transaction Statement under Section 13(e) of the Securities Exchange Act of 1934 and Rule 13e-3 (§ 240.13e-3) thereunder
21.	SEC	17 CFR § 240.14d-100	Schedule TO. Tender Offer Statement under Section 14(d)(1) or 13(e)(1) of the Securities Exchange Act of 1934
22.	SEC	17 CFR § 240.17g-7	Disclosure Requirements
23.	Treasury	17 CFR § 403.5	Custody of Securities Held by Financial Institutions that are Government Securities Brokers or Dealers
24.	Treasury	17 CFR § 420.4	Recordkeeping
25.	Treasury	17 CFR § 420.3	Reporting (Large Position Reporting)
26.	Treasury / Bureau of the Fiscal Service ("BFS")	31 CFR § 356.31	How Does the STRIPS Program Work?
27.	Treasury / BFS	31 CFR § 356.2	What Definitions Do I Need to Know to Understand This Part?
28.	Treasury / BFS	31 CFR § 356.10	What Is the Purpose of an Auction Announcement?
29.	Treasury / BFS	31 CFR § 357.20	Securities Account in Legacy Treasury Direct
30.	Treasury / BFS	31 CFR § 356.13	When Must I Report My Net Long Position and How Do I Calculate It?

	Agency / Subdivision or Bureau	Law, Rule or Regulation	Title		
31.	Treasury / BFS	31 CFR § 356.5	What Types of Securities Does the Treasury Auction?		
32.	Treasury / BFS	31 CFR § 357.2	Definitions (Regulations Governing Book-Entry Treasury Bonds, Notes and Bills Held in Treasury/Reserve Automated Debt Entry System (Trades) and Legacy Treasury Direct)		
33.	Treasury / Internal Revenue Service ("IRS")	26 CFR § 1.6049-7	Returns of Information with Respect to REMIC Regular Interests and Collateralized Debt Obligations		
34.	Treasury / IRS	26 CFR § 1.6045-1	Returns of Information of Brokers and Barter Exchanges		
35. 36.	Treasury / IRS Treasury / IRS	26 CFR § 1.1012-1 26 CFR § 1.6031(c)-1T	Basis of Property Nominee Reporting of Partnership Information (Temporary)		
37.	Treasury / IRS	26 CFR § 1.142(f)(4)-1	Manner of Making Election to Terminate Tax-Exempt Bond Financing		
38.	Treasury / IRS	26 CFR § 1.6045A-1	Statements of Information Required in Connections with Transfers of Securities		
39.	Treasury / IRS	26 CFR § 1.165-12	Denial of Deduction for Losses on Registration-Required Obligations Not in Registered Form		
40.	Treasury / IRS	26 CFR § 301.6501(c)-1	Exceptions to General Period of Limitations on Assessment and Collection		
41.	Treasury / IRS	26 CFR § 1.6045B-1	Returns Relating to Actions Affecting Basis of Securities		
42.	Treasury / IRS	26 CFR § 1.671-5	Reporting for Widely Held Fixed Investment Trusts		
43.	Treasury / Monetary Offices	31 CFR Pt. 148, App. A	Appendix A to Part 148 – File Structure for Qualified Financial Contract Records		
44.	OCC	12 CFR § 9.18	Collective Investment Funds		
45. 46.	CFTC CFTC	17 CFR § 1.25	Investment of Customer Funds Record of Investments		
47.	CFTC	17 CFR § 1.27 17 CFR § 30.7	Treatment of Foreign Futures or Foreign Options Secured Amount		

	Agency / Subdivision or Bureau	Law, Rule or Regulation	Title
48.	FDIC	12 CFR Pt. 370, App. C	Appendix C to Part 370 – Credit
			Balance Processing File Structure
49.	FDIC	12 CFR Pt. 371, App. B	Appendix B to Part 371 – File
			Structure for Qualified Financial
			Contract Records for Full Scope
			Entities

APPENDIX B

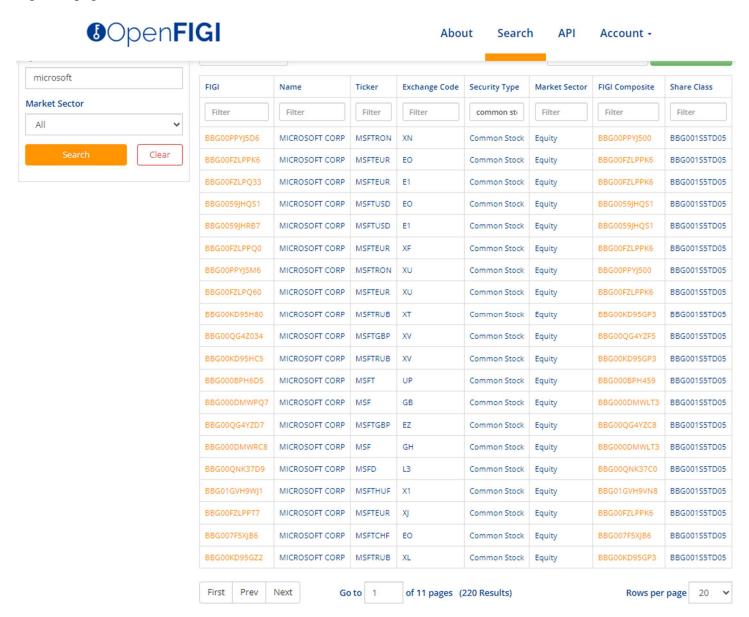
Asset Class Coverage of CUSIP

Equity	Debt	Other
 Common / Ordinary Shares Preferred Shares ADRs and GDRs Exchange Traded Funds Indices Limited Partnerships 	 Corporate Bonds Municipal Bonds US Treasury and Agencies: Bonds, Bills, Notes Sovereign Supranational Agencies 	 Credit Derivatives (RED codes) Market Agreed Coupon (MAC) Swaps Hedge Funds Physical Precious Metals Restricted 144A and Reg S Securities
• Listed Options – U.S./Canada	Bankers AcceptancesCommercial Paper	Other Private Securities (incl. digital/tokenized)
 Mutual Funds REITs Rights Single Stock Options Warrants Unit Investment Trusts 	 Medium-Term Notes Certificates of Deposit Mortgage-Backed Securities Asset-Backed Securities CLOs / CDOs Structured Products Syndicated Bank Loans 	 Structured and Hybrid Products Variable Annuities Other Insurance-Related Products Special Purpose Acquisition Companies (SPACs) Digital Assets

APPENDIX C

Microsoft Common Stock Search Results on OpenFIGI

A search of Microsoft common stock on OpenFIGI returns 220 results, as shown on the bottom of the captured pages.





BBG0077H2VP1

BBG00QG4YZF5

BBG00KD95GY3

MICROSOFT CORP

MICROSOFT CORP

MICROSOFT CORP

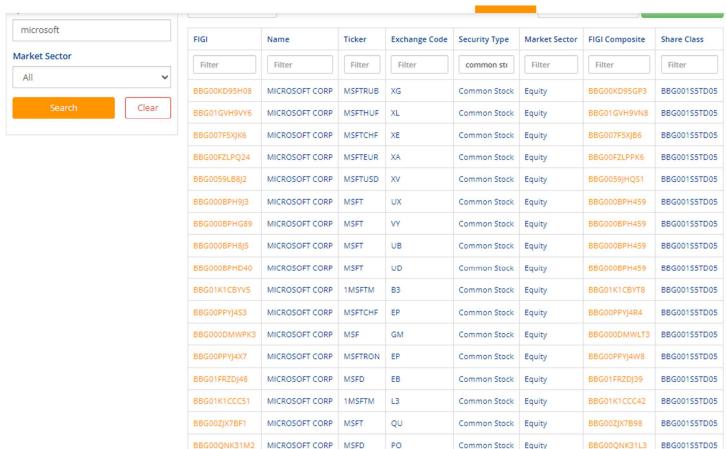
MSE

MSFTRUB

QT

ΧJ

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Common Stock

Common Stock

Common Stock

Equity

Equity

Equity

BBG0077H2VN3

BBG00QG4YZF5

BBG00KD95GP3

BBG001S5TD05

BBG001S5TD05

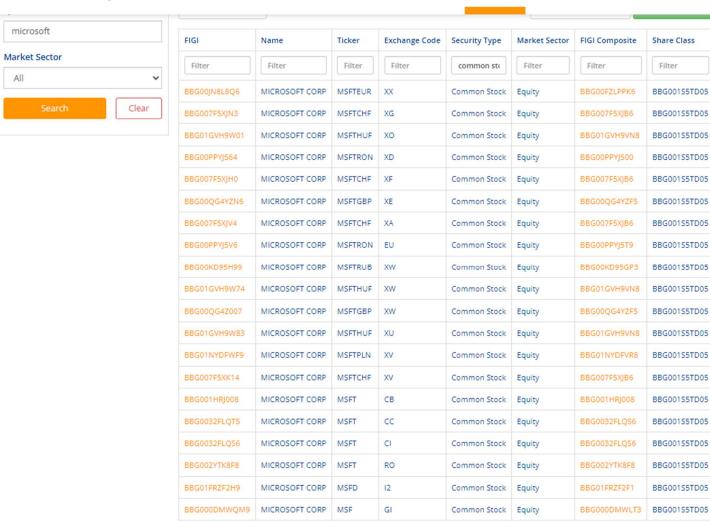
BBG001S5TD05



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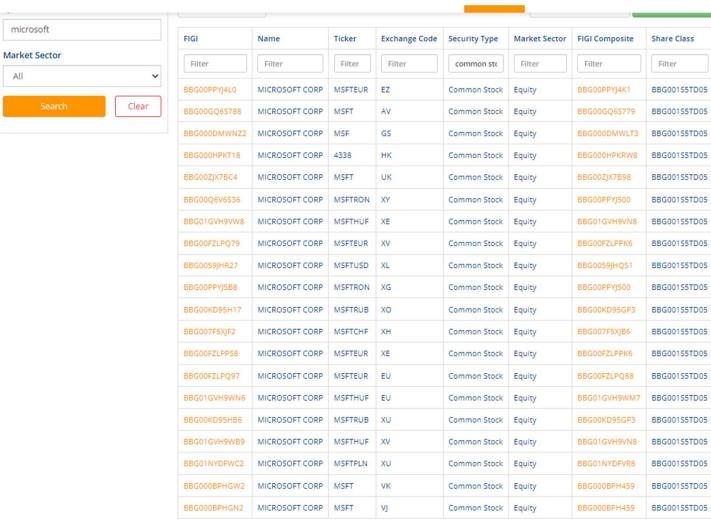
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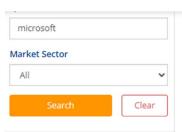
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OpenFIGI

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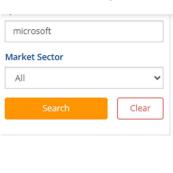


FIGI	Name	Ticker	Exchange Code	Security Type	Market Sector	FIGI Composite	Share Class
Filter	Filter	Filter	Filter	common stc	Filter	Filter	Filter
BBG00J7BK3V3	MICROSOFT CORP	1MSFT	IM	Common Stock	Equity	BBG00J7BK3T6	BBG001S5TD0
BBG018H7JX68	MICROSOFT CORP	MSF	LA	Common Stock	Equity	BBG000DMWLT3	BBG001S5TD0
BBG000RFRFV9	MICROSOFT CORP	MSFTN	TQ	Common Stock	Equity	BBG000RFRFK1	BBG001S5TD0
BBG00B8TC820	MICROSOFT CORP	MICRC	RC	Common Stock	Equity	BBG00B8TC802	BBG001S5TD
BBG01GVH9VZ5	MICROSOFT CORP	MSFTHUF	XG	Common Stock	Equity	BBG01GVH9VN8	BBG001S5TD
BBG00KD95HL5	MICROSOFT CORP	MSFTRUB	EU	Common Stock	Equity	BBG00KD95HK6	BBG001SSTD
BG007F5XJX2	MICROSOFT CORP	MSFTCHF	XT	Common Stock	Equity	BBG007F5XJB6	BBG001S5TD
BG00QG4YZL8	MICROSOFT CORP	MSFTGBP	XF	Common Stock	Equity	BBG00QG4YZF5	BBG001S5TD
BG00PPYJ500	MICROSOFT CORP	MSFTRON	EO	Common Stock	Equity	BBG00PPYJ500	BBG001S5TD
BG01GVH9VN8	MICROSOFT CORP	MSFTHUF	EO	Common Stock	Equity	BBG01GVH9VN8	BBG001S5TD
BBG007F5XJM4	MICROSOFT CORP	MSFTCHF	XL	Common Stock	Equity	BBG007F5XJB6	BBG001S5TD
3BG000BPH654	MICROSOFT CORP	MSFT	UN	Common Stock	Equity	BBG000BPH459	BBG001S5TD
BG00X1PP4J4	MICROSOFT CORP	MSFT	VP	Common Stock	Equity	BBG000BPH459	BBG001S5TD
3BG00QG4YZB9	MICROSOFT CORP	MSFTGBP	EP	Common Stock	Equity	BBG00QG4YZ92	BBG001S5TD
BG00PPYJ4Q5	MICROSOFT CORP	MSFTUSD	EZ	Common Stock	Equity	BBG00PPYJ4P6	BBG001S5TD
BG00KD95HH0	MICROSOFT CORP	MSFTRUB	XX	Common Stock	Equity	BBG00KD95GP3	BBG001S5TD
3BG00QG4YZP4	MICROSOFT CORP	MSFTGBP	XJ	Common Stock	Equity	BBG00QG4YZF5	BBG001S5TD
BG00QG4YZJ1	MICROSOFT CORP	MSFTGBP	XH	Common Stock	Equity	BBG00QG4YZF5	BBG001S5TD
BG00PPYJ573	MICROSOFT CORP	MSFTRON	XE	Common Stock	Equity	BBG00PPYJ500	BBG001S5TD
BG00PPYJ5H2	MICROSOFT CORP	MSFTRON	XA	Common Stock	Equity	BBG00PPYJ500	BBG001S5TD

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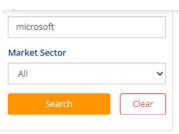


FIGI	Name	Ticker	Exchange Code	Security Type	Market Sector	FIGI Composite	Share Class
Filter	Filter	Filter	Filter	common stc	Filter	Filter	Filter
BBG00PPYJ5L7	MICROSOFT CORP	MSFTRON	xw	Common Stock	Equity	BBG00PPYJ500	BBG001S5TD0
BBG007F5XJZ0	MICROSOFT CORP	MSFTCHF	XU	Common Stock	Equity	BBG007F5XJB6	BBG001S5TD0
BBG01GVH9VR4	MICROSOFT CORP	MSFTHUF	XH	Common Stock	Equity	BBG01GVH9VN8	BBG001S5TD0
BBG01NYDFW23	MICROSOFT CORP	MSFTPLN	XG	Common Stock	Equity	BBG01NYDFVR8	BBG001S5TD0
3BG000BPH958	MICROSOFT CORP	MSFT	UM	Common Stock	Equity	BBG000BPH459	BBG001S5TD0
BG000DMWLT3	MICROSOFT CORP	MSF	GR	Common Stock	Equity	BBG000DMWLT3	BBG001S5TD0
BG00PPYJ4V9	MICROSOFT CORP	MSFTCHF	EZ	Common Stock	Equity	BBG00PPYJ4T2	BBG001S5TD
3BG018J15ZN0	MICROSOFT CORP	MSF	LU	Common Stock	Equity	BBG000DMWLT3	BBG001S5TD
BG007F5XJL5	MICROSOFT CORP	MSFTCHF	xj	Common Stock	Equity	BBG007F5XJB6	BBG001S5TD
BG00KD95HG1	MICROSOFT CORP	MSFTRUB	XQ	Common Stock	Equity	BBG00KD95GP3	BBG001S5TD
BG01GVH9WD7	MICROSOFT CORP	MSFTHUF	XQ	Common Stock	Equity	BBG01GVH9VN8	BBG001S5TD
BG00Q6RT5K1	MICROSOFT CORP	MSFTUSD	X2	Common Stock	Equity	BBG0059JHQS1	BBG001S5TD
BG00PPYJ591	MICROSOFT CORP	MSFTRON	XL	Common Stock	Equity	BBG00PPYJ500	BBG001S5TD
BG00PPYJ5N5	MICROSOFT CORP	MSFTRON	XV	Common Stock	Equity	BBG00PPYJ500	BBG001S5TD
BG00PPYJ555	MICROSOFT CORP	MSFTRON	XF	Common Stock	Equity	BBG00PPYJ500	BBG001S5TD
BG01GVH9VT2	MICROSOFT CORP	MSFTHUF	XF	Common Stock	Equity	BBG01GVH9VN8	BBG001S5TD
BG00FZLPPN3	MICROSOFT CORP	MSFTEUR	XH	Common Stock	Equity	BBG00FZLPPK6	BBG001S5TD
BG00KD95GX4	MICROSOFT CORP	MSFTRUB	XE	Common Stock	Equity	BBG00KD95GP3	BBG001S5TD
BG01NYDFW14	MICROSOFT CORP	MSFTPLN	XL	Common Stock	Equity	BBG01NYDFVR8	BBG001S5TD
BG01NYDFVX1	MICROSOFT CORP	MSFTPLN	XF	Common Stock	Equity	BBG01NYDFVR8	BBG001S5TD

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FIGI	Name	Ticker	Exchange Code	Security Type	Market Sector	FIGI Composite	Share Class
Filter	Filter	Filter	Filter	common ste	Filter	Filter	Filter
BBG01NYDFW78	MICROSOFT CORP	MSFTPLN	XA	Common Stock	Equity	BBG01NYDFVR8	BBG001S5TD
BBG01NYDFW96	MICROSOFT CORP	MSFTPLN	XT	Common Stock	Equity	BBG01NYDFVR8	BBG001S5TD
BBG00YJ6SX71	MICROSOFT CORP	MSFTUSD	X9	Common Stock	Equity	BBG00YJ6SX53	BBG001S5TD
BBG00X1L7VH5	MICROSOFT CORP	MSFT	VG	Common Stock	Equity	BBG000BPH459	BBG001S5TD
BBG000BPHFS9	MICROSOFT CORP	MSFT	UW	Common Stock	Equity	BBG000BPH459	BBG001S5TD
BBG0032FLQV2	MICROSOFT CORP	MSFT	CE	Common Stock	Equity	BBG0032FLQS6	BBG001S5TD
BBG001HRJ017	MICROSOFT CORP	MSFT	CX	Common Stock	Equity	BBG001HRJ008	BBG001S5TD
BBG00FZMHMQ4	MICROSOFT CORP	MSF	GZ	Common Stock	Equity	BBG00FZMHMP5	BBG001S5TD
BBG00KD95GV6	MICROSOFT CORP	MSFTRUB	XF	Common Stock	Equity	BBG00KD95GP3	BBG001S5TD
3BG00KD95H62	MICROSOFT CORP	MSFTRUB	XA	Common Stock	Equity	BBG00KD95GP3	BBG001S5TD
3BG00QG4Z016	MICROSOFT CORP	MSFTGBP	XU	Common Stock	Equity	BBG00QG4YZF5	BBG001S5TD
BBG00PPYJ5C7	MICROSOFT CORP	MSFTRON	хо	Common Stock	Equity	BBG00PPYJ500	BBG001S5TD
BBG01GVH9W65	MICROSOFT CORP	MSFTHUF	XT	Common Stock	Equity	BBG01GVH9VN8	BBG001S5TD
BBG00KD95HJ8	MICROSOFT CORP	MSFTRUB	XZ	Common Stock	Equity	BBG00KD95GP3	BBG001S5TD
BBG01NYDFWB3	MICROSOFT CORP	MSFTPLN	XW	Common Stock	Equity	BBG01NYDFVR8	BBG001S5TD
BBG01NYDFXD9	MICROSOFT CORP	MSFTPLN	EU	Common Stock	Equity	BBG01NYDFXC0	BBG001S5TD
BBG000BPH4R5	MICROSOFT CORP	MSFT	UA	Common Stock	Equity	BBG000BPH459	BBG001S5TD
BBG006M6ZMY4	MICROSOFT CORP	MSFT	BW	Common Stock	Equity	BBG000LF7Z07	BBG001S5TD
BBG000DMWMK0	MICROSOFT CORP	MSF	GD	Common Stock	Equity	BBG000DMWLT3	BBG001S5TD
BBG000DMWN19	MICROSOFT CORP	MSF	GY	Common Stock	Equity	BBG000DMWLT3	BBG001S5TD

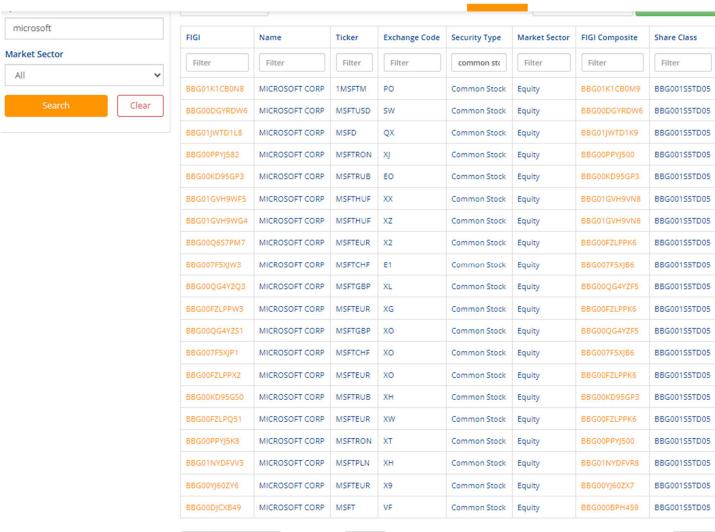
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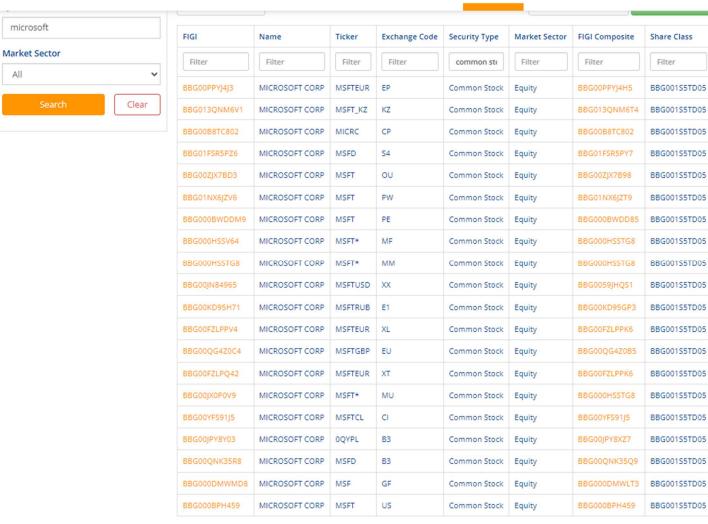
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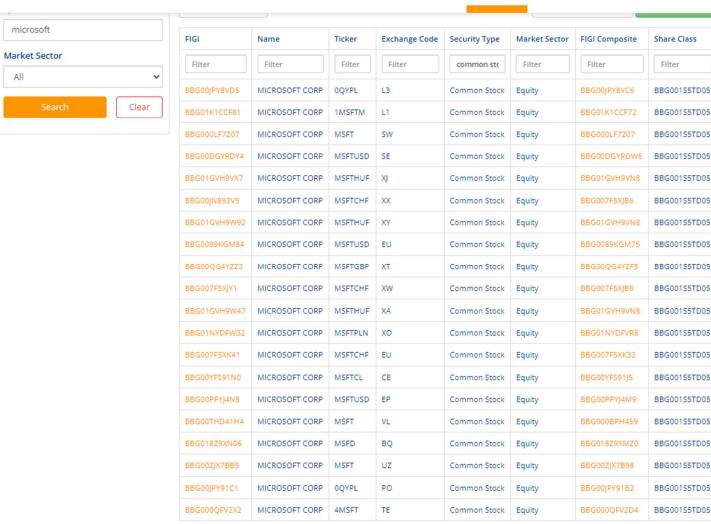
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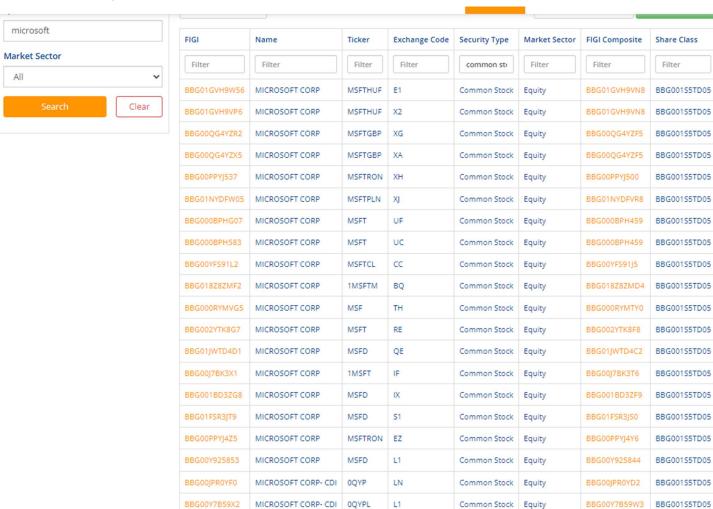
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APPENDIX D

OpenFIGI Search Results for Collin County Community College District Consolidated Fund Revenue Bonds, Series 2024

Open	FIG	I				About	Search A	PI Account +	
Quick Search		FIGI	Name	Ticker	Exchange Code	Security Type	Market Sector	FIGI Composite	Share Class
194742FS6									
		Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter
Market Sector									
All	~								
Search	lear								

APPENDIX E

CUSIP & FIGI Comparison

	CUSIP	FIGI
HIGH LEVEL DESCRIPTION	 9-character unique identifier representing up to 60, sometimes more, related reference data fields that capture all key differentiating characteristics of the instrument. Machine readable, searchable, and API accessible using schemas. 	 12-character unique identifier representing up to 13 related reference data fields including three FIGI identifiers and Bloomberg specific ticker and exchange codes. Machine readable, searchable, and API accessible using schemas.
DEVELOPMENT AND MAINTENANCE	 CUSIP was developed in 1968 in partnership with many financial market participants. CUSIP governance is based on an advisory Board of Trustees that represent the financial services industry. 	 FIGI was developed solely by Bloomberg, which continues to build, update, and administer it. In 2015, FIGI was adopted by The Object Management Group, a technical standards-setting organization that is not financial services focused.
DOMESTIC (ANSI) STANDARD RECOGNITION	• CUSIP (X9.6) has been recognized as an American National Standard by the American National Standards Institute (ANSI) since 1976 .	FIGI was just recently recognized as an American National Standard (X9.145) by ANSI in 2021.
GLOBAL INTEROPERABIL ITY	 CUSIP is integral to the interconnected global markets through the ISO-standardized ISIN because CUSIP is the national identifier used in ISIN for over 30 countries. More than 200 jurisdictions worldwide and approximately 120 global stock exchanges (including all major ones), securities depositories, and national numbering agencies, rely on and support the ISIN. Under MiFIR and MiFID II, all reportable transactions in financial instruments must include the ISIN. 	 FIGI's global use is limited. The OpenFIGI website lists only 20 global exchanges that use FIGI in some way. However, most major global exchanges are not listed, e.g., NYSE, London, Deutsche Boerse, Euronext, Tokyo, Shanghai, Bombay, and Brazil. To date, outside of the U.S., only Brazil's standardization body has approved FIGI as a standard, yet it is not used by B3, Brazil's primary exchange, which instead uses a Brazilian local code and ISIN.
LEI MAPPING	CUSIP/ISIN maps to its issuer's LEI, made freely available with no restrictions. Over 1.4 million issuer LEIs are linked to active U.S. ISINs.	OpenFIGI provides no mapping of securities to their issuer's LEI.
REFERENCE DATA	 A subscription to CUSIP data provides the subscriber with up to 60 reference data fields, occasionally more, for each financial instrument. When possible, reference data is based on ISO standards including LEI, ISIN, MIC, FINS, and CFI. A subscription to CUSIP data provides subscribers with all reference data. Over 33% of CUSIP data customers (including those who need data for 500 or fewer CUSIPs, are using data for academic or teaching purposes, use the data for regulatory reporting only, or who access data in a read-only format) do not pay fees for 	 OpenFIGI provides users with only up to 13 related reference data fields including three FIGI identifiers, as well as Bloomberg's own ticker and exchange codes. Reference data is not based on ISO standards. A paid subscription to Bloomberg or another vendor's data feed is necessary to access many important reference data fields that enable the differentiation between financial instruments based on the open-license data alone.

ASSET CLASS COVERAGE	 CUSIPs cover a wide range of global financial instruments, including extensive equity and debt issues, derivatives, listed equity options, single stock futures as well as syndicated loans, municipal loans, corporate loans, collateral loan obligations, equity options, hedge funds, private placements, and digital assets. Securities issuers have full control of when CUSIPs are issued, including significantly before trading begins. 	 Based on OpenFIGI, FIGIs cover commodity, corporate, currency, equity (including options), government, index, money market, mortgage, municipal, preferred, and crypto assets. Unclear when and how FIGIs are assigned to issued financial instruments. FIGIs or FIGI mapping are not always available or not available on a timely basis.
FINANCIAL MARKET USE, INCLUDING REGULATORY REPORTING	 CUSIP is widely used and relied upon by agencies and market participants for capital formation, trading, clearance and settlement, regulatory reporting, U.S. governments securities issuances, internal data and risk management, and monitoring risk. CUSIPs are referenced in over 60 financial reporting forms issued and collected by the Agencies, almost 50 federal rules and regulations, and in statutes. CUSIP was added to rules and regulations after it had already demonstrated its usefulness and efficiencies in the market. 	 FIGI was designed to store and interrelate information specific to each security as traded on a particular exchange, e.g., pricing or volume. FIGI is not used operationally for key asset classes such as municipals, corporate loans, and global bonds. FIGI reporting is permitted in a limited set of agency forms—mostly as an option in addition to CUSIP or in one SEC form, FIGI reporting is required only if the security has a FIGI code assigned. Also, FIGI is referenced in only a handful of CFR regulations or final agency rules.
FUNGIBILITY	 CUSIP is fungible. One CUSIP identifier represents the same security regardless of the venue where it is traded. SEC and CFTC stated in 2024 that "a fungible identifier is preferable because it will allow for more consistent reporting of assets than a nonfungible identifier regardless of the venue of execution, resulting in more effective monitoring and assessment of system risk." 	FIGI is non-fungible. Hundreds of FIGIs can be used to represent one security. FIGI also has different hierarchies depending on the asset class. For example, for common stock, there are venue specific FIGIs, composite FIGIs (an identifier within the same country, market, or currency) and a share class FIGI (an identifier regardless of country or trading venue), but no such hierarchy exists for other assets like municipal bonds.
HANDLING OF CORPORATE ACTIONS	 Although a security and its CUSIP are often paired for the full life of the security, CUSIPs can be updated to reflect major corporate actions like reverse stock splits, mergers, acquisitions resulting in capitalization changes, or purposeful delisting. CUSIP permanence rules have been and continue to be developed in consultation with market participants based on market needs. 	 FIGI is deliberately designed to have identifier permanence. FIGIs do not change after major corporate actions such as mergers or reverse stock splits, and do not allow to differentiate securities before or following corporate actions. Permanence rules were developed by Bloomberg.

EXHIBIT 1

Financial Data Transparency Act Joint Data Standards Proposed Rulemaking

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October 21, 2024

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I. Introduction

- 1. The Financial Data Transparency Act of 2022 ("FDTA") requires financial regulatory agencies ("Agencies"), including the Securities Exchange Commission ("SEC"), to establish data standards for the collection of information reported to them by financial market participants under their jurisdiction. In response, the Agencies published a joint rule proposal on August 22, 2024, titled "Financial Data Transparency Act Joint Data Standards" ("Proposed Rule") that would designate certain data standards, and would create a legal framework under which the Agencies would implement these standards.
- 2. To the extent that the Agencies' individual rules do not already reflect the standards, the Agencies will ultimately have to engage in further rulemaking to amend their existing rules as needed to implement the standards.² I understand that the Proposed Rule would give the Agencies some flexibility to tailor the data standards, including the flexibility to use identifiers that are not in the joint data standards. For example, this may be the case if an agency determined that "using the identifier established by the final joint rule was not feasible...or that using an identifier that is not in the joint standards...would minimize disruptive changes to the persons affected by those standards." This flexibility needs to be considered in the context of the goal of the FDTA, which is to "promote interoperability of financial regulatory data across members of the [Financial Stability Oversight] Council."
- 3. However, despite the "flexibilities and discretion" the Agencies have when implementing data standards through their Agency-specific rulemaking, the Agencies must strive to implement the proposed joint data standards "to the extent feasible" and would need to justify any deviations from those standards.
- 4. As published, the Proposed Rule does not examine the current baseline or identify any market failure or inefficiencies in regulatory reporting. The Proposed Rule, by not providing market participants with any economic analysis in the public release at the proposal stage, did

¹ In addition to the Securities and Exchange Commission, these agencies also include the Department of the Treasury, the Office of the Comptroller of the Currency ("OCC"), the Board of Governors of the Federal Reserve System ("Board"), the Federal Deposit Insurance Corporation ("FDIC"), the National Credit Union Administration, the Consumer Financial Protection Bureau, the Federal Housing Finance Agency, and the Commodity Futures Trading Commission ("CFTC"). See Financial Data Transparency Act Joint Data Standards, Federal Register Vol. 89 No. 163, August 22, 2024, pp. 67890–67908 ("Proposed Rule") at p. 67891.

² See Proposed Rule, p. 67894.

³ See Proposed Rule, footnote 20 and accompanying text.

⁴ FDTA, Section 124(c)(2).

⁵ Proposed Rule, p. 67895.

⁶ Proposed Rule, p. 67895.

not alert market participants as to the potential changes to their future reporting obligations and any attendant burdens.

- 5. In this note, I focus on one aspect of the Proposed Rule. The Agencies have proposed that the joint data standards should employ the Financial Instrument Global Identifier ("FIGI") for the identification of financial instruments. My primary focus is to consider the implications of using FIGI as a standard identifier for purposes of reporting under SEC rules, although the issues I address should have implications for the other Agencies as well. My goal is to provide thinking and economic analysis that the Agencies should have outlined in the Proposed Rule, and which now may be helpful to the Agencies as they consider how to finalize the joint data standards—and after a standard is adopted, helpful to the SEC and the other Agencies as they decide whether it is appropriate to amend rules to implement FIGI as a mandatory standard for data reporting using the appropriate baseline.
- 6. The use of FIGI as a securities identifier for SEC reporting would represent a fundamental change from the status quo. As I discuss further below, SEC reporting regimes including Form 13F, Schedules 13D/G, and mutual fund portfolio reporting rules, among others, currently require reporting based on the Committee on Uniform Security Identification Procedures ("CUSIP") identifier. In a 2024 rulemaking, the CFTC and SEC have explicitly recognized the benefits of using an identifier such as CUSIP that unambiguously provides a unique identifier referring to a single security. The two agencies specifically considered but rejected the idea of FIGI as a required identifier on the basis that "a fungible identifier [like CUSIP] is preferable because it will allow for more consistent reporting of assets than a nonfungible identifier [like FIGI]...resulting in more effective monitoring and assessment of systemic risk."8
- 7. My understanding is that the FDTA seeks to establish data standards not only for information provided directly to the SEC, but also for information provided to certain Self-Regulatory Organizations ("SROs") under the SEC's jurisdiction—the Municipal Securities Rulemaking Board ("MSRB") and Financial Industry Regulatory Authority ("FINRA").9 Current MSRB and FINRA rules also require trade reporting based on CUSIP.

⁸ SEC Release No. IA-6546; File No. S7-22-22, pp. 129-130.

⁷ See Proposed Rule, p. 67897.

⁹ FDTA, Sections 203–204; "Self-Regulatory Organization Rulemaking," SEC, available at https://www.sec.gov/rules-regulations/self-regulatory-organization-rulemaking.

- 8. As I explain below, CUSIP (and where appropriate the international version International Securities Identification Number ("ISIN")) are natural identifiers for position reporting and trade reporting because these are the identifiers used at the Depository Trust and Clearing Corporation ("DTCC") and other clearing agencies domestically and internationally for purposes of holding financial instruments at the depository and for clearance and settlement of transactions. Institutions such as custodian banks, lending agents, and broker dealers must have systems based on ISIN/CUSIP to custody shares, clear and settle trades, to participate in the securities lending market, or to use securities as collateral in financing transactions.
- 9. Given that ISIN and CUSIP are deeply ingrained in the systems of market participants, and already serve as the basis for position reporting and trade reporting, the SEC must consider the extent to which moving to FIGI for reporting purposes would be disruptive to market participants, would impose costs that are unnecessary or not justified by the benefits, or might have other unintended consequences.
- 10. Overall, the Proposed Rule neither examines the current economic baseline nor identifies any market failure or inefficiency in regulatory reporting or the Proposed Rule's likely economic consequences—benefits and costs—but instead defers to the second stage Agency-specific implementation of the data standards that would follow the adoption of the Proposed Rule. However, if adopted as proposed, the Proposed Rule would likely establish the joint data standards as the new economic baseline that the Agencies would use in conducting their own respective feasibility analyses. In so doing, the impact on the market would likely not be fully analyzed. Individual Agencies would concentrate on any deviations from the proposed joint data standards rather than analyzing the economic impacts of transitioning from current, widely used identifiers to those specified in the new standards. As a result, cost assessments would be narrowly focused on the compliance costs associated with amending specific rules, rather than considering the broader implications for the interoperability of the financial market ecosystem. The rulemaking process would benefit from thorough economic analysis by the Agencies, especially at this stage when the joint data standards are being proposed. This analysis should include the various information collections affected by the Proposed Rule, the identifiers currently used in those collections, and the extent to which those identifiers do not currently meet regulatory reporting needs, to demonstrate the anticipated benefits of any finalized specific data standards and whether those benefits justify the expected costs.

11. The remainder of this note is organized as follows: I first provide an overview of relevant sections of the Proposed Rule and background on the identifiers for financial instruments considered by the Agencies (i.e., ISIN/CUSIP and FIGI). I then provide an overview of relevant guidance related to economic analysis for rulemaking, followed by a discussion of potential questions the Agencies would need to consider in their economic analysis, including potential cost and other unintended consequences the adoption of FIGI as the common identifier for financial instruments may have.

II. Overview of Relevant Portions of the Proposed Rule

12. The Proposed Rule is mandated by the FDTA to "to promote interoperability of financial regulatory data." Specifically, the FDTA requires the Agencies to jointly develop data standards that "will later be adopted for certain collections of information in separate rulemakings by the [A]gencies." The Proposed Rule states that "individual Agency proposals will follow after the establishment of the joint standards."

13. Specifically, the FDTA states that:13

"The data standards established in the final rules promulgated under subsection (b) shall—

- (A) include common identifiers for collections of information reported to covered agencies or collected on behalf of the Council, which shall include a common nonproprietary legal entity identifier that is available under an open license for all entities required to report to covered agencies; and
- (B) to the extent practicable—
 - (i) render data fully searchable and machine-readable;
 - (ii) enable high quality data through schemas, with accompanying metadata documented in machine-readable taxonomy or ontology models, which clearly define the semantic meaning of the data, as defined by the underlying regulatory information collection requirements;
 - (iii) ensure that a data element or data asset that exists to satisfy an underlying regulatory information collection requirement be

¹⁰ Proposed Rule, p. 67893.

¹¹ Proposed Rule, p. 67891.

¹² Proposed Rule, p. 67894.

¹³ FDTA, Section 124(c)(1).

consistently identified as such in associated machine-readable metadata;

- (iv) be nonproprietary or made available under an open license;
- (v) incorporate standards developed and maintained by voluntary consensus standards bodies; and
- (vi) use, be consistent with, and implement applicable accounting and reporting principles."
- 14. Following the mandate of the FDTA, the Agencies proposed the joint data standards on August 22, 2024. While "[t]he Agencies propose that the joint rule would take effect on the first day of the next calendar quarter that begins at least 60 days after the final rule is published in the Federal Register," the joint data standards "adopted by each implementing Agency through their respective Agency-specific rulemaking must take effect not later than two years after the final joint rule is promulgated." 15
- 15. The scope of the Proposed Rule is limited to "collections of information reported to each [Agency] by financial entities under the jurisdiction of the [Agency]." It is explicitly mentioned that "collections of information that do not include reporting requirements…and that are not reported to an Agency by a specified type of financial entity are outside the scope of the FDTA," and that, "[l]ikewise, specified collections of information that are not regularly reported to the relevant Agency, or that are subject to the 'monetary policy' exception are also outside the scope of the FDTA." As mentioned above, my understanding is that the FDTA seeks to establish joint data standards not only for information provided directly to the Agencies, but also for information provided to certain SROs under the SEC's jurisdiction—the MSRB and FINRA.¹⁸
- 16. While the data standards ultimately adopted by the Agencies in their Agency-specific rulemaking "must incorporate and ensure compatibility with, to the extent feasible, applicable joint [data] standards," the Proposed Rule provides some flexibility in some cases noting that "each implementing Agency (1) may scale data reporting requirements to reduce any unjustified burden on smaller entities affected by the regulations and (2) must seek to minimize disruptive changes to those entities or persons." As an example, the Proposed

¹⁴ Proposed Rule, p. 67899.

¹⁵ Proposed Rule, p. 67895.

¹⁶ Proposed Rule, p. 67895.

¹⁷ Proposed Rule, p. 67895.

¹⁸ FDTA, Sections 203–204; "Self-Regulatory Organization Rulemaking," SEC, available at https://www.sec.gov/rules-regulations/self-regulatory-organization-rulemaking.

¹⁹ Proposed Rule, p. 67895.

Rule mentions that "an Agency could determine to use an identifier that is not in the joint standards...rather than, or in addition to or in combination with, an identifier established by the final joint rule if, for example, the Agency exercised its authority to tailor the joint standards in its Agency-specific rulemaking...or the Agency determined either that using the identifier established by the final joint rule was not feasible...or that using an identifier that is not in the joint standards...would minimize disruptive changes to the persons affected by those standards."²⁰ However, in light of the goals of the FDTA, which are to promote data sharing and interoperability of the data, this discretion is limited because any deviation from the proposed joint data standards, if adopted, would need to be justified in light of these goals. This is not the same as analyzing the economic consequences of choosing the joint data standards in the first place and cannot replace such an analysis.

- 17. The Proposed Rule discusses various identifiers, data transmission, schema, and taxonomy format standards. In the following, I focus on the proposed common identifier for financial instruments, for which "the Agencies propose to establish the Financial Instrument Global Identifier (FIGI)."²¹ The Proposed Rule states that "[t]he FIGI is an international identifier for all classes of financial instruments, including, but not limited to, securities and digital assets," which is "non-proprietary[,]...available under an open license," and "has been implemented as a U.S. standard."²² The Proposed Rule further mentions that "the Agencies also considered CUSIP and the ISIN (which includes the CUSIP)." While acknowledging that those "are widely used," the Proposed Rule states that they "are proprietary and not available under an open license in the United States."²³
- 18. I note that while the FDTA explicitly states that the data standards "shall include a common nonproprietary legal entity identifier that is available under an open license," it does not explicitly ask for a common identifier for financial instruments. The House Appropriations Committee recently published a report in relation to the Financial Services and General Government Appropriations Bill for Fiscal Year 2025, which, among other things, includes guidance to the SEC, indicating that "[t]he Committee recognizes that the [FDTA] contains no reference to securities-level identifiers. The Committee expects the

²⁰ Proposed Rule, p. 67895, footnote 20.

²¹ Proposed Rule, p. 67897.

²² Proposed Rule, p. 67897.

²³ Proposed Rule, p. 67897.

²⁴ FDTA, Section 124(c)(1)(A).

SEC, in its joint rulemaking, to implement the FDTA consistent with Congressional intent and avoid disrupting the U.S. capital markets."²⁵

III. Background on Identifiers for Financial Instruments Considered by the Agencies

A. Background on ISIN and CUSIP

- 19. ISIN is considered the global standard identifier for all types of financial instruments, including equity, debt, derivatives, and indices.²⁶ National Numbering Agencies ("NNAs") are responsible for the assignment of ISINs in their respective countries.²⁷ Developed in 1981, the ISIN was recommended for adoption by the G30 in 1989 to enable the electronic handling of trade clearing and settlement.²⁸ ISINs are also used to track holdings of institutional investors because the code is in a format that is consistent across markets worldwide.²⁹
- 20. In 1964, the American Bankers Association was asked to create the CUSIP, to develop a unique identifier for every existing and future security in the U.S., which became available in 1968.³⁰ Today, the mandate is carried out by CUSIP Global Services ("CGS") and the system is managed by FactSet Research Systems.³¹ CUSIPs are assigned for financial instruments in the U.S., Canada, as well as over 30 other jurisdictions, and also form the basis for their ISINs (which is created by adding a country code at the beginning and a check digit at the end).³²
- 21. The list of financial instruments that need to be identified is huge and constantly changing, and new ISINs/CUSIPs are generated on a daily (or even intraday) basis.³³ In equity markets, ISINs/CUSIPs may also change to reflect certain corporate actions.³⁴ A

²⁵ "H. Rept. 118–556 – Financial Services and General Government Appropriations Bill, 2025," 118th Congress, June 17, 2024, pp. 78–79.

²⁶ See "Identifiers," The Association of National Numbering Agencies, available at https://anna-web.org/identifiers/.

²⁷ See "ISIN," *CUSIP Global Services*, available at https://www.cusip.com/identifiers.html#/ISIN.

²⁸ See "ISINs – Powering T+1 STP transformation," *LSEG*, September 14, 2023 ("LSEG 2023").

²⁹ See LSEG 2023.

³⁰ Virginia B. Morris and Kenneth M. Morris, "CUSIP – A Common Language for Efficient Markets," *CUSIP Global Services*, 2022 ("CUSIP Global Services 2022"), pp. 4-5.

³¹ CUSIP Global Services 2022, p. 5.

³² See "ISIN," *CUSIP Global Services*, available at https://www.cusip.com/identifiers.html#/ISIN; "CUSIP," *CUSIP Global Services*, available at https://www.cusip.com/identifiers.html#/CUSIP; "CINS," *CUSIP Global Services*, available at https://www.cusip.com/identifiers.html#/CINS. CGS is the NNA responsible for the assignment of ISINs in the U.S. (and other areas where designated or appointed).

³³ For example, in August 2024, 7,602 new North American corporate CUSIPs, 1,270 new municipal CUSIPs, and 709 new international CUSIPs have been requested. Overall, nearly 70,000 new CUSIPs have been requested between January and August 2024. See "CUSIP Issuance Trends – August 2024," *CUSIP Global Services*, September 20, 2024.

³⁴ See CUSIP Global Services 2022, pp. 8–9.

significant infrastructure is necessary to ensure that the identifiers are created and changed in real time and all market participants involved with custody or transfer of securities have timely access to accurate information. For example, new ISINs/CUSIPs can be requested via CGS with one-hour turnaround time for so-called "Express" requests and CUSIP data updates are delivered near real-time to market participants requiring this capability.³⁵

1. ISIN/CUSIP is essential for clearing and settlement worldwide.

- 22. The ISIN/CUSIP is essential for the trading, clearing and settlement, and depository applications in the U.S. and the rest of the world, and thus would be difficult and costly to replace. Furthermore, this application requires a high standard of accuracy, timeliness, and industry coordination.
- 23. For example, for securities to become and remain eligible for DTC depository services,³⁶ the issuer needs to obtain a CUSIP for each of its issues.³⁷ DTC eligibility is a prerequisite for securities to be held at the DTC, which in turn facilitates clearing and settling trades at the DTCC, stock, lending, and other transfers of securities across firms. ISINs/CUSIPs were also critical for the transformation of clearing and settlement to trade date plus one day (T+1) in the U.S.³⁸ Furthermore, a CUSIP is required when applying for listing shares on security exchanges.³⁹ Outside of the U.S., the European Union requires the inclusion of the ISIN in the prospectus that needs to be published when securities are offered to the public or admitted to trading on a regulated market.⁴⁰

³⁵ See "Applying for a new identifier online is quick and easy," *CUSIP Global Services*, available at https://www.cusip.com/apply/index.html. See also "CUSIP Global Services Improves Reference Data Transparency with Near Real-Time Alerts on New Security Issuance and CUSIP Record Changes," PR Newswire, available at https://www.prnewswire.com/news-releases/cusip-global-services-improves-reference-data-transparency-with-near-real-time-alerts-on-new-security-issuance-and-cusip-record-changes-300595570.html. The approximate turnaround is one to two business days for regular requests. See "Fees for CUSIP Assignment," *CUSIP Global Services*, available at https://www.cusip.com/pdf/FeesforCUSIPAssignment.pdf. I was not able to obtain a similar statistic for requesting a new FIGI

³⁶ "DTCC's core clearing and settlement subsidiaries, The Depository Trust Company (DTC), National Securities Clearing Corporation (NSCC) and Fixed Income Clearing Corporation (FICC), deliver significant operational efficiencies across the U.S. equities and fixed income markets, reducing risk and cost for clients while ensuring safety and reliability in the marketplace. In 2023, approximately 953 million securities valued at \$446 trillion were settled at DTCC in an efficient and risk-controlled process." See "Clearing & Settlement Services," *The Depository Trust and Clearing Corporation*, available at https://www.dtcc.com/clearing-and-settlement-services. See also "Operational Arrangements," *The Depository Trust Company*, August 2024, p. 6.

³⁷ "Operational Arrangements," *The Depository Trust Company*, August 2024, p 23.

³⁸ See LSEG 2023.

³⁹ See e.g., "Checklist for Supporting Documents Required for Original Listing Application," *NYSE*, p. 2, available at https://www.nyse.com/publicdocs/nyse/listing/NYSE_Listing_Application_Checklist.pdf; "Initial Listing Guide," *Nasdaq*, p. 4, available at https://listingcenter.nasdaq.com/assets/initialguide.pdf.

⁴⁰ See Commission Delegated Regulation (EU) 2019/980, Annex 11–17, 19, 23, 26, 27, available at https://eurlex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02019R0980-20200917; Regulation (EU) 2017/1129 of the European Parliament and of the Council, June 14, 2017, Article 7, 5(a) and 7(a)(i), available at https://eurlex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02017R1129-20211110.

24. Thus, market participants that are involved with issuance, clearance and settlement, custody, stock lending, or security transfers (e.g., issuers, transfer agents, depositories, clearinghouses, or custodian banks) must have operational systems in place that use ISIN/CUSIP identifiers.

2. Various information collected by the Agencies requires the inclusion of ISIN and/or CUSIP.

- 25. While not providing a comprehensive list of all reports to the Agencies that require the inclusion of ISIN or CUSIP identifiers, I want to provide a few examples of SEC disclosure rules that explicitly require those identifiers.
 - a. **SEC Form 13F** (filed by institutional investment managers and listing select assets under management) requires the inclusion of CUSIP.⁴¹
 - b. **SEC Schedules 13D**⁴² and **13G**⁴³ (to be filed after acquiring more than 5% ownership of a Section 13 security) require the inclusion of the CUSIP identifier.
 - c. **SEC Form N-PORT** (for registered investment companies, monthly schedule of portfolio investments at the fund level) requires the use of CUSIP (if available) as well as ISIN, and only allows the use of the ticker as an identifier if the ISIN is not available, and of another unique identifier if both ISIN and ticker are not available.⁴⁴
 - d. **SEC Form N-MFP** (monthly schedule of portfolio holdings of money market funds) requires the use of CUSIP and, in addition to CUSIP, at least one additional identifier (which can be the ISIN).⁴⁵
 - e. **SEC Form PF** (reporting for certain investment advisers to private funds) requires the use of CUSIP and, in addition to CUSIP, at least one additional identifier (which can be the ISIN, CIK, or another unique identifier).⁴⁶

 $^{^{41}}$ See "Frequently Asked Questions About Form 13F," SEC, available at https://www.sec.gov/divisions/investment/13ffaq. 42 17 CFR 240.13d-101.

⁴³ 17 CFR 240.13d-101.

⁴⁴ See SEC Form N-Port, available at https://www.sec.gov/files/formn-port.pdf.

⁴⁵ See SEC Form N-MFP, available at https://www.sec.gov/files/formn-mfp.pdf.

⁴⁶ See SEC Form PF, available at https://www.sec.gov/files/formpf.pdf.

- f. SEC Form N-CEN (annual report for registered investment companies) requires the use of the ticker and CUSIP when reporting any divestments by unit investment trusts.47
- 26. A CUSIP is also required when reporting trades to SROs. For example, FINRA requires that the mandatory notice of an offering of a security includes "the CUSIP number or if a CUSIP number is not available, a similar numeric identifier."48 Reporting of trades to FINRA must be based on a security's CUSIP or FINRA symbol.⁴⁹ Similarly, the MSRB requires the assignment and reporting of CUSIPs for municipal securities, unless a security "does not meet the eligibility criteria for CUSIP number assignment." In fact, the MSRB explicitly references CUSIP when determining which transactions must be reported: "In the real-time environment, all customer trades in municipal securities issues that have CUSIP numbers...must be reported, except municipal fund securities. Dealers should not report (a) customer transactions in issues ineligible for CUSIP number assignment and (b) municipal fund securities."51

B. **Background on FIGI**

27. The FIGI was originally developed by Bloomberg using a methodology called Bloomberg Open Symbology. This system was designed to identify financial instruments across all global asset classes.⁵² Formerly known as the Bloomberg Global ID, the specification was adopted in 2014 by the non-profit consortium Object Management Group and was renamed FIGI.⁵³ The FIGI was designed to provide identifiers for multiple different purposes, not just for providing a unique common identifier at the asset level. For example, for equity instruments and equity options, FIGI provides identifiers designed for identifying trading activity in a particular region, on a particular venue.⁵⁴ This functionality is useful for

⁴⁷ See SEC Form N-CEN, available at https://www.sec.gov/files/formn-cen.pdf.

⁴⁸ See FINRA Rule 6760, available at https://www.finra.org/rules-guidance/rulebooks/finra-rules/6760.

⁴⁹ See "Frequently Asked Questions (FAQ) about the Trade Reporting and Compliance Engine (TRACE)," FINRA, Items 3.1.41 and 3.4.2, available at https://www.finra.org/filing-reporting/trace/faq.

⁵⁰ See MRSB Rule G-34, available at https://www.msrb.org/Rules-and-Interpretations/MSRB-Rules/General/Rule-G-34.

⁵¹ See "Specifications for Real-Time Reporting of Municipal Securities Transactions," MSRB, Version 4.1, November 2022,

p. 15.

52 "What's in a name? The Bloomberg Global ID is reborn as the FIGI," *Bloomberg Press Announcement*, October 9, 2014. derivatives, corporate and government bonds, as well as those that previously lacked standard identifiers, such as crypto assets and loans." Allocation Rules for the Financial Instrument Global Identifier (FIGI) Standard, Version 29.9, July 2022 ("FIGI Allocation Rules"), p. 3.

⁵³ "What's in a name? The Bloomberg Global ID is reborn as the FIGI," Bloomberg Press Announcement, October 9, 2014.

⁵⁴ FIGI Allocation Rules, pp. 5–6.

market participants who want to track variables such as prices or trading volumes with reference to a particular geographical region or trading venue. Thus, a single security may be allocated many different FIGIs defined at different levels, such as at the Share Class level (e.g., Microsoft common stock), Composite level (e.g., Microsoft common stock traded in the U.S.), or Trading Venue level (e.g., Microsoft common stock traded in the U.S. on the NYSE).⁵⁵ Although these different FIGIs ultimately refer to the same security, they refer to the security in a specific context.

- 28. Bloomberg and Kaiko are the two current certified providers for the FIGI standard, where Kaiko focuses on providing FIGIs only for crypto assets, and Bloomberg assigns all other FIGIs.⁵⁶ Assigned FIGIs do not change because of corporate actions.⁵⁷
- 29. Since January 2023, SEC Form 13F includes the option to report an instrument's FIGI in addition to the mandatory CUSIP identifier. If a filer decides to include a FIGI, the Share Class FIGI for that security must be used.⁵⁸

IV. Economic Analysis of Relevant Portions of the Proposed Joint Data Standards

- 30. The Proposed Rule does not include any analysis of the baseline or the Proposed Rule's likely economic consequences—benefits or costs—but instead defers to the second stage Agency-specific rulemaking that would follow the adoption of the Proposed Rule. The lack of economic analysis is discussed by CFTC Commissioner Caroline D. Pham, who mentions the "insufficient discussion of the impact and costs associated with the adoption of these new data standards that will apply across the banking and financial services sector."⁵⁹ Similarly, SEC Commissioner Hester M. Peirce states that "[t]he Commission did not conduct an economic analysis for this proposal" and that a "[m]angling implementation [of the data standards] could result in costs disproportionate to the benefits."⁶⁰
- 31. Despite the "flexibilities and discretion"⁶¹ the Agencies have when implementing the joint data standards through their Agency-specific rulemaking, once the new economic

⁵⁵ While warrants and equity options are also allocated a FIGI at the Composite and Trading Venue level, only one FIGI gets assigned per security for all other asset classes. See FIGI Allocation Rules, pp. 6, 19.

⁵⁶ FIGI Allocation Rules, p. 4.

⁵⁷ FIGI Allocation Rules, pp. 2, 14.

⁵⁸ See SEC Release No. 34-95148; File No. S7-15-21, pp. 6-7.

⁵⁹ Proposed Rule, p. 67908.

⁶⁰ Hester M. Peirce, "Data Beta: Statement on Financial Data Transparency Act Joint Data Standards Proposal," August 2, 2024.

⁶¹ Proposed Rule, p. 67895.

baseline has been established in the joint rulemaking, the Agencies will be required to implement the final joint data standards "to the extent feasible" and would need to justify any deviations from those standards. As mentioned above, in so doing, the impact on the market would likely not be fully analyzed. Individual Agencies would concentrate on any deviations from the proposed joint data standards rather than analyzing the economic impacts of transitioning from current, widely used identifiers to those specified in the new standards. As a result, cost assessments would be narrowly focused on the compliance costs associated with amending specific rules, rather than considering the broader implications for the interoperability of the financial market ecosystem. As stated by SEC Commissioner Hester M. Peirce, "we are proposing joint data standards, which we will then apply to our respective rulebooks." Thus, it is imperative that the Agencies at least conduct an analysis of the likely economic impact, including identifying the relevant baseline and analyzing the costs and benefits, of the Proposed Rule at the current stage, given that the Agencies will be largely be bound by the joint data standards at the Agency-specific stage of rulemaking.

- 32. Given the statutory goal of interoperable data standards across Agencies and the wide range of market participants that would be impacted by introducing a new financial instrument identifier, conducting a thorough economic analysis is critical for the Agencies to reasonably propose and finalize the joint data standards. Unfortunately, the Proposed Rule does not mention any economic analysis, which indicates that either the Agencies did not conduct any such analysis or if they did conduct such an analysis, they did not make it public. This makes it unclear as to why the Agencies even selected FIGI as the common identifier for financial instruments. For example, it is unknown whether the Agencies even attempted to solicit information from different market participants who would be affected by the introduction of a new common identifier (e.g., information about feasibility, costs, and risks of changing reporting requirements to use a new identifier).
- 33. Conducting and including economic analysis in the public release at the proposal stage would not only assist the Agencies in implementing the FDTA mandate, but also alert market participants as to their future reporting obligations. The economic analysis should examine the various information collections affected by the Proposed Rule, the identifiers currently used in those collections, how those identifiers are used by market participants, the

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⁶² Proposed Rule, p. 67895.

⁶³ Hester M. Peirce, "Data Beta: Statement on Financial Data Transparency Act Joint Data Standards Proposal," August 2, 2024.

extent to which those identifiers do not currently meet regulatory reporting needs, what changes market participants would need to make if certain identifiers are selected, and the potential impact the adoption of certain identifiers may have on reporting quality. To gauge the potential economic impact of the Proposed Rule, the Agencies could use by analogy the impact of the adoption of other identifiers through prior rulemakings. One such example was the adoption of LEI as a unique identification code for the reporting of swap information to registered swap data repositories.⁶⁴ Such an analysis would allow the Agencies to (1) determine whether the adoption of a common identifier for financial instruments is even necessary⁶⁵ and (2) to gain insights into the potential costs and benefits of adopting either FIGI or an alternative identifier for the Agencies and market participants at large.

- 34. As noted above, the CFTC and SEC recently have dealt with the question of whether to require market participants to use FIGI instead of CUSIP for reporting purposes. In their joint rule amending Form PF (which allows for the optional submission of FIGI as an other unique identifier in addition to the mandatory CUSIP), the two agencies explicitly recognize the benefits of using an identifier such as CUSIP that unambiguously provides a unique identifier referring to a single security: "[F]or reporting on Form PF, a fungible identifier is preferable because it will allow for more consistent reporting of assets than a nonfungible identifier regardless of the venue of execution, resulting in more effective monitoring and assessment of systemic risk. We are not adopting a change to permit the substitution of FIGI for CUSIP." The underlying economic analysis performed by the CFTC and SEC in this case may also be informative for the Agencies when assessing the potential economic impact of the Proposed Rule.
- 35. There is a precedent for joint rule proposals involving multiple agencies to include an analysis of the potential economic impact of the rule. For example, when the OCC, Board, FDIC, and SEC proposed the implementation of Section 13 of the Bank Holding Company ("BHC") Act in 2011, the agencies provided a discussion of "significant aspects of the proposed rule and potential economic impacts that may result from section 13 of the BHC Act's requirements, as proposed to be implemented." The proposal also includes a

⁶⁴ See Release No. 34-74244; File No. S7-34-10, pp. 470-603.

⁶⁵ I understand that the adoption of a common identifier for financial instruments is not mandated by the FDTA. See Section II.

⁶⁶ I.e., a system under which each instrument only has a single identifier regardless of the country or venue it is traded.

⁶⁷ SEC Release No. IA-6546; File No. S7-22-22, pp. 129-130.

⁶⁸ SEC Release No. 34-65545; File No. S7-41-11, p. 302.

discussion of the impact of the rule on competition and on the promotion of efficiency, competition, and capital formation.⁶⁹ The proposed amendments to the regulations implementing Section 13 of the BHC Act, published in 2020, also include an economic analysis by the SEC.⁷⁰

36. Overall, the Proposed Rule currently lacks an analysis of its likely economic consequences and the extent to which the proposed adoption of FIGI as the common identifier for financial instruments would address any existing market failure or inefficiency in regulatory reporting. The rulemaking process would benefit from thorough economic analysis by the Agencies, both during the proposal and adoption of the joint standards, as well as by individual Agencies when implementing them. This analysis should include a cost-benefit evaluation to demonstrate how the anticipated benefits of specific data standards compare to the expected costs. In addition, rigorous economic analysis can still be conducted if dollar estimates are unavailable; it can rely on data analysis or fundamental economic principles to inform and justify the adoption of proposed data standards, even when precise monetary costs or benefits cannot be calculated. Finally, the economic analysis should discuss reasonable alternatives and why the Agencies chose the current rulemaking versus other possibilities.

A. Background on Guidance Related to Economic Analysis for Rulemaking

- 37. Any rulemaking should consider the economic impact of the Proposed Rule (and of identified alternatives), including an assessment of potential costs and benefits. In this section, I discuss guidance provided by the Office of Management and Budget ("OMB"), which "evaluates, formulates, and coordinates management procedures and program objectives within and among Federal departments and agencies."
- 38. In September 2003, OMB provided guidance to Federal agencies regarding the development of regulatory analysis ("2003 OMB Guidance").⁷² In November 2023, OMB updated this guidance ("2023 OMB Guidance").⁷³

⁶⁹ SEC Release No. 34-65545; File No. S7-41-11, pp. 368-376.

⁷⁰ SEC Release No. BHCA-8; File No. S7-02-20, pp. 139–219.

⁷¹ "Management and Budget Office," *Federal Register*, available at https://www.federalregister.gov/agencies/management-and-budget-office.

⁷² Circular A-4, Office of Management and Budget, September 17, 2003 ("2003 OMB Guidance").

⁷³ Circular A-4, Office of Management and Budget, November 9, 2023 ("2023 OMB Guidance").

39. In both documents, OMB discusses the use of cost-benefit analysis for regulatory analysis and indicates that a cost-benefit analysis is an important tool used for regulatory analysis.⁷⁴ OMB also states that regulatory analysis is needed to inform policymakers and the public about the likely effects of regulatory actions.⁷⁵ The 2023 OMB Guidance includes a quote from Executive Order 12866 that emphasizes the importance of a cost-benefit analysis even when costs and benefits cannot be quantified:

"Costs and benefits shall be understood to include both quantifiable measures (to the fullest extent that these can be usefully estimated) and qualitative measures of costs and benefits that are difficult to quantify, but nevertheless essential to consider." ⁷⁶

- 40. OMB acknowledges that it may be difficult to quantify benefits and costs and recommends analyzing the uncertainties associated with the regulatory analysis.⁷⁷ In the 2023 OMB Guidance, OMB states that "[a]n effect of a regulation should not be excluded from a regulatory analysis simply because its estimation is highly uncertain."⁷⁸
- 41. OMB indicates that when cost and benefit estimates are uncertain, under certain circumstances, the combination of plausible assumptions with data and models may help develop a probability distribution of costs and benefits.⁷⁹ In this scenario, it is necessary to discuss the quality of the available data, the assumptions, and any inferences resulting from the analysis.⁸⁰
- 42. In addition, OMB recognizes that a lack of knowledge or other reasons may prevent the construction of probability distributions. In these circumstances, estimates of benefits and costs should be developed using plausible scenarios based on qualitative information.⁸¹
- 43. Moreover, OMB states that if no quantification of costs and benefits is possible, unquantified benefits and costs should be discussed using qualitative information and the "strengths and limitations of the qualitative information" should be analyzed.⁸²

⁷⁴ 2003 OMB Guidance, p. 2; 2023 OMB Guidance, p. 2.

⁷⁵ 2023 OMB Guidance, p. 2.

⁷⁶ 2023 OMB Guidance, p. 2.

⁷⁷ 2003 OMB Guidance, p. 38.

⁷⁸ 2023 OMB Guidance, p. 67.

⁷⁹ 2003 OMB Guidance, pp. 18, 38.

^{80 2003} OMB Guidance, p. 39.

^{81 2003} OMB Guidance, pp. 18, 39.

^{82 2003} OMB Guidance, p. 27.

B. Identifying the Need for a Rulemaking

44. Good economic analysis starts with identifying a need for the rulemaking, and a characterization of an appropriate economic baseline against which the Proposed Rule's likely economic impact is measured. The Agencies therefore need to analyze the extent to which the proposed adoption of FIGI as the common identifier for financial instruments would address any market failure or inefficiency in regulatory reporting. When defining an appropriate baseline, the Agencies would need to consider which market participants would likely be affected by the rule, how those market participants operate today using a financial instrument identifier, and to what extent they would be impacted by a change of reporting requirements. Furthermore, guidance provided by the SEC requires "identifying and evaluating reasonable alternatives to the proposed regulatory approach" and to consider those alternatives when assessing any potential economic impact.83 In other words, it is essential to explain why regulation is necessary and to give examples of market failures. In its absence, the argument that new data reporting standards will simplify data analysis for regulators appears to be an insufficient justification. I understand that the Agencies claim that FIGI could be available under an open license and that its adoption will potentially allow for additional reporting detail.84 Unfortunately, the Agencies have not established or supported the extent of those claimed benefits.

C. Challenges the Agencies May Face When Performing an Economic Analysis of Adopting FIGI as a Common Identifier for Financial Instruments

- 45. The proposed rulemaking does not evaluate the economic trade-offs of moving to a new identifier, in particular, the imposition of potentially substantial incremental costs.
- 46. If the Agencies require the use of FIGI by market participants for reporting purposes, they should consider how those market participants would attempt to comply with the new reporting requirements and assess the costs of implementing new or amending existing processes. The need for such analysis is also recognized by CFTC Commissioner Caroline D. Pham, who states that the Proposed Rule "would be improved by addressing head-on the elephant in the room—the very real costs that will be imposed on potentially tens of

84 Proposed Rule, p. 67897.

⁸³ Memorandum: Re: "Current Guidance on Economic Analysis in SEC Rulemakings," Division of Risk, Strategy and Financial Innovation (RSFI) and the Office of the General Counsel (OGC), SEC, March 16, 2012, pp. 1–2.

thousands of firms of all sizes that will eventually have to update their systems and records to adhere to the new data standards."85

- 47. This exercise may be complicated by the fact that many different market participants likely have different processes in place for reporting purposes. Understanding how the different entities would comply with any amendments to the reporting requirements would require the SEC and the other Agencies to solicit information from various market participants. For example, market participants who rely on ISIN/CUSIP may need to map those identifiers to FIGI while others may decide to update their systems to exclusively rely on FIGI.
 - 1. Market participants that use ISIN/CUSIP for various business purposes would likely attempt to comply with the new reporting requirements by mapping those identifiers to FIGIs.
- 48. Entities who have reporting or disclosure requirements often develop integrated technologies that interface with and pull data from their existing systems to generate reports. Section the critical role of ISIN and CUSIP identifiers in trading, clearing, settlement, and depository processes both in the U.S. and internationally, Tamany existing systems currently rely on these identifiers for financial instruments. Consequently, replacing ISINs or CUSIPs with FIGIs in these systems is impractical. Market participants impacted by the Proposed Rule will likely continue to use ISIN and CUSIP identifiers for daily operations, regardless of the identifiers used for reporting purposes. Therefore, it is uncertain if adopting FIGI would result in any cost savings and may result in additional costs as a result of segmenting reporting from other system functions. Thus, requiring these participants to report using FIGI would likely introduce an additional layer of complexity, increasing costs and the potential for reporting errors. Should the Agencies mandate FIGI for reporting, market participants would likely need to develop new modules to match FIGIs with ISINs/CUSIPs from available databases. The reliability of these databases, their update frequency, potential

⁸⁵ Proposed Rule, p. 67908.

⁸⁶ For example, the SEC in their proposal to amend Form 13F states that "larger managers are more likely to have trading and other systems that can export all of the manager's positions (regardless of size) for purposes of reporting on Form 13F." Release No. 34-89290; File No. S7-08-20, p. 31.

⁸⁷ See Section III.A.1.

⁸⁸ The SEC discusses a potential mapping between CUSIPs and FIGIs when considering alternatives to the rule amending Form 13F. Specifically, the SEC states that "[f]inding the FIGI associated with a security's CUSIP number can be done for free, but given the length of many Form 13F filings, some data users would seek to perform such conversion in bulk on a

errors, and associated costs remain unclear. Market participants might also need to continually update their internal security master lists to track ISIN/CUSIP and FIGI mappings, incurring further ongoing expenses. The complexity and cost of doing such mapping could be different for different market participants and different reporting regimes. It could be particularly costly, for example, if the adoption of FIGI would be required for real-time trade reporting to FINRA or MSRB.

- 49. The FIGI provides information for equity instruments and listed funds, which allows users to identify the market and venue where a specific security is traded.⁸⁹ However, while this level of detail may be helpful when tracking variables such as prices or trading volumes with reference to a particular geographical region or trading venue, the fact that a single security can have multiple different FIGIs may complicate the mapping exercise and lead to incorrect matches and, eventually, to misreporting.⁹⁰ Market participants would need to make sure to report the correct FIGI required for a specific reporting purpose, such as the Share Class FIGI, a Composite FIGI, or an Exchange Level FIGI.
- 50. In addition to cases where one ISIN/CUSIP can be mapped to multiple FIGIs, there may be situations in which an ISIN/CUSIP cannot be mapped to a FIGI (e.g., because the FIGI is not included in the database used for mapping identifiers or because no FIGI has been assigned for a specific instrument).
- 51. Finally, to the extent that corporate actions are treated differently under the ISIN/CUSIP and FIGI specifications, there may not always be a one-to-one mapping between ISIN/CUSIP and Share Class level FIGIs, which may lead to further confusion and misreporting when reporting information about financial instruments to the Agencies. For example, the FIGI of a financial instrument "does not change as a result of corporate action" whereas "a new CUSIP will continue to be assigned for reverse stock splits and forward stock splits with a mandatory exchange of shares." To illustrate the different treatment of

programmatic basis rather than manually. Such bulk conversion could be done programmatically using a free API on the OpenFIGI webpage, but data users that had not already integrated FIGIs into their systems would incur an initial time burden of preparing the database and creating the query to leverage the free mapping API. In addition, with respect to any data users that chose to continue storing CUSIP numbers in their systems rather than integrate FIGIs, those data users would be subject to license-based fees and restrictions associated with converting FIGIs (or other security identifiers such as ticker symbols) to CUSIPs in bulk." The SEC does not discuss any issues that might arise when trying to perform such mapping or the quality of the information included in the database that is used for the mapping. I discuss some of those issues in this and the next section. See SEC Release No. 34-95148, File No. S7-15-21, pp. 55–56.

⁹⁰ See e.g., Craig M. Lewis, "Analysis of Voluntarily Reported Financial Instrument Global Identifiers (FIGIs) in SEC Form 13F Filings," October 11, 2024 ("Form 13F Analysis"), attached as Appendix 1.

 ⁹¹ FIGI Allocation Rules, p. 14.
 92 "CUSIP Permanence FAQ," CUSIP Global Services, July 2021, available at https://www.cusip.com/pdf/news/CUSIPGlobalServices-Permanence-FAQ.pdf.

corporate actions, consider BlackSky Technology Inc.'s announcement of a 1-for-8 reverse stock split of its Class A common stock on September 4, 2024, which took effect after trading hours on September 6, 2024.⁹³ The CUSIP for BlackSky's common stock was changed from 09263B108 to 09263B207. However, the corresponding Share Class level FIGI (BBG00QRY6P42), the U.S. Composite level FIGI (BBG00QRY6P33), and the Trading Venue level FIGI for shares traded on the New York Stock Exchange (BBG00R2NH507) remained the same.⁹⁴ Reporting positions or trades based on CUSIP would enable market participants to clearly distinguish whether the report refers to pre-split or post-split shares, whereas the use of FIGI may lead to ambiguity and confusion.

- 2. Only using FIGI instead of any other financial instrument identifier may lead to further issues when identifying financial instruments.
- 52. Market participants that do not rely on ISIN/CUSIP for other purposes would still need to update their reporting systems, which likely use CUSIP,⁹⁵ to include FIGI. As discussed in the previous section, this could be done by mapping ISINs/CUSIPs to FIGIs. However, some market participants may decide to exclusively rely on FIGI. In that case, market participants may face a one-time cost of updating their systems to use FIGI for reporting purposes. They would also need to identify the correct FIGI for a financial instrument by using the instrument's name or by some other method.
- 53. Finding the FIGI for a financial instrument using its name rather than its unique ISIN/CUSIP may lead to further complications. For example, using the free search functionality of OpenFIGI96, I find two FIGIs for the municipal bond "CA ORAWTR 10/07/2071": BBG014BVCY10 and BBG014BV8ZN8. However, none of the provided information allows for differentiating between those two FIGIs. Only access to proprietary data, such as data from Bloomberg, allows one to identify BBG014BVCY10 as the FIGI for Tranche A and BBG014BV8ZN8 as the FIGI for Tranche B of the bond. I find similar unclear matches for mortgage-backed securities. For example, for the instrument name "FRCI 2.5 N," OpenFIGI provides two FIGIs: BBG00KK05710 and BBG00NTFYNJ6.

⁹³ "BlackSky Announces 1-for-8 Reverse Stock Split of Class A Common Stock," BlackSky Technology Inc. Press Release, September 4, 2024.

⁹⁴ See mapping provided by OpenFIGI for CUSIPs 09263B108 and 09263B207, accessed on October 4, 2024.

⁹⁵ See Section III.A.2 for examples of data reported to the SEC, FINRA, and MSRB that require the use of CUSIP.

⁹⁶ See OpenFIGI, accessed on September 24, 2024.

However, there is no information available to distinguish between the two instruments, as all other fields provided by OpenFIGI are identical. There are other examples where the tickers for distinct instruments differ minutely, but these differences do not provide enough information to distinguish between those instruments (without access to further proprietary information). The tickers provided by OpenFIGI appear to be proprietary Bloomberg tickers and as such, there seems to be no open-source database that would allow market participants to find the relevant ticker for a given instrument (that they could then use to find the correct FIGI). For example, J.P. Morgan Chase issued certificates of deposit under the name "JPM Float 08/09/28." There are three FIGIs associated with this financial instrument: BBG004WJ4H39, BBG004V12R11, and BBG004WG0D83. While the capitalization of the related tickers differs marginally (i.e., JPM V0 08/09/28 cD, JPM V0 08/09/28 CD, and JPM V0 08/09/28 Cd), there is no additional information provided by OpenFIGI that would allow a market participant to ascertain the different features of these three instruments. Similar examples can be found for U.S. Government STRIPS.⁹⁷

- 54. Thus, it seems unrealistic to expect market participants to rely solely on public, non-proprietary information to identify a financial instrument's FIGI, as that information appears to be insufficient for reporting purposes. Instead, they would likely need to either (1) map another identifier, such as an ISIN or CUSIP, to the FIGI, or (2) pay for proprietary information to accurately identify the correct FIGI for a given financial instrument.
- 55. In some cases, market participants might find that the most efficient way to comply with the amended rules is to employ the services of a third-party vendor that may provide integrated tools to append FIGI to existing schemata. If, in practice, using FIGI for regulatory reporting requires market participants to pay for services, this could undermine the regulatory goal of achieving cost savings by using a "non-proprietary" identifier. If the costs of these services do not decrease when requiring FIGI instead of ISIN, CUSIP, or other identifiers for reporting purposes, the intended cost-saving benefit may not be realized.

⁹⁷ See e.g., FIGIs BBG00WBPBSN2, BBG00LL1CJB0, and BBG01HMJK8S5 with tickers SPY 0 07/31/25, SP 0 07/31/25, and SPX 0 07/31/25, respectively. All instruments have a security description that is equal to their ticker.

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3. Inconsistent reporting of FIGIs may compromise the quality of the reported data.

- 56. The SEC has recently concluded that "a fungible identifier...will allow for more consistent reporting of assets than a nonfungible identifier..., resulting in more effective monitoring and assessment of systemic risk." In fact, data collected by the Agencies is used by other stakeholders. For example, in the context of amending Form 13F, the SEC has stated that "[w]hile Form 13F was originally designed to assist regulators and the public in understanding the effects of institutional equity ownership on the markets, the pool of users of the data has expanded to include academics, market researchers, the media, attorneys pursuing private securities class-action matters, and market participants (including institutional investors themselves) who use the data to enhance their ability to compete." Similarly, academic researchers investigating the quality of information reported in Form 13F filings have argued that "[t]he ability of 13F users to accomplish their disparate goals depends crucially on the underlying integrity of these reports."
- 57. The challenges of mapping other financial instrument identifiers, such as ISIN or CUSIP, to FIGIs—resulting in multiple, incorrect, or missing matches—along with difficulties in identifying the correct FIGI based on the instrument's name, could ultimately lead to errors in the data collected by the Agencies. ¹⁰¹ In a separate research report, I analyze voluntarily reported FIGIs in SEC Form 13F reports filed between January 2023 and August 2024. My analysis indicates that the uptake of FIGI reporting has been rather slow and that a large share of holdings with an optional FIGI has been reported inconsistently. This suggests that the design of the FIGI system, because it employs many different identifiers corresponding to the same security, is prone to confusion when used in reporting. ¹⁰²
- 58. The Agencies may also use information collected by commercial data vendors to conduct economic analyses (e.g., data from the Center for Research in Security Prices or from S&P Global's Compustat). To the extent that those third-party databases do not include FIGIs, the Agencies would need to use other identifiers to successfully link them with their

⁹⁸ SEC Release No. IA-6546; File No. S7-22-22, pp. 129-130.

⁹⁹ SEC Release No. 34-89290; File No. S7-08-20, p. 22.

¹⁰⁰ See Anne Anderson and Paul Brockman (2018), "An Examination of 13F Filings," *The Journal of Financial Research*, 41(3), pp. 295–324, at p. 296.

¹⁰¹ I note that there is a risk that such errors will instigate enforcement actions and potential fines which are also costly.

¹⁰² Form 13F Analysis.

own data collections. The need to perform such mapping would mitigate the usefulness of the joint data standards and would likely introduce further data errors.¹⁰³

59. Thus, the Agencies would also need to consider the economic impact of a potential decline in the quality of the reported data and the data used for their economic analyses due to inconsistent reporting of FIGIs when assessing the economic impact, including the costs and benefits, of adopting FIGI as a common identifier for reporting purposes.

D. Quantification of Economic Cost and Benefits

- 60. When performing an economic analysis of the Proposed Rule's likely economic consequences (and, in the second stage, the consequences of any Agency-specific implementations of the data standards), the Agencies would need to evaluate whether and to what extent using FIGI for regulatory reporting would make the collected data more useful, more interoperable, more comparable, or more accurate than under the status quo (i.e., using identifiers such as ISIN/CUSIP or ticker). The Agencies would also need to consider whether the adoption of FIGI might instead risk making the data more prone to errors. This is especially relevant considering the stated goal of the FDTA of "reduc[ing] the private sector's regulatory compliance burden, while enhancing transparency and accountability," and of the Financial Stability Act of 2010, which is meant "to promote the financial stability of the United States by improving accountability and transparency in the financial system." Without demonstrating that there is some market failure or inefficiency in regulatory reporting that the adoption of FIGI would help to improve, it is not clear why and how the adoption of FIGI would benefit market participants.
- 61. Assuming the SEC and the other Agencies decide to amend some of their rules to adopt the FIGI for reporting purposes, the compliance cost to market participants will depend on the details of such amendments, in particular which rules will be amended and whether the use of FIGI will be optional or mandatory. For any individual rule that will be amended, the compliance cost will ultimately depend on the extent to which market participants will need to update their systems to comply, and how many market participants would be affected. For example, market participants may conclude that a significant amount of re-programming

¹⁰³ I note that it may also be costly for the data vendors to update their systems and create crosswalk tables to include FIGIs in their datasets. For reasons discussed above (e.g., different treatment of corporate actions), it may not be possible to add FIGIs for all observations in their historical datasets.
¹⁰⁴ See FDTA.

¹⁰⁵ Financial Stability Act of 2010, S.3217, 111th Congress, April 29, 2010.

might be required to include FIGI in their reports.¹⁰⁶ This may especially be true if rules will be amended that concern any real-time accurate reporting, such as the intra-day reporting of trades. Presumably, this could involve different kinds of entities, including broker-dealers, bank custodians, investment advisers, or institutional investors.¹⁰⁷ The potentially large number of market participants that may need to update their systems to comply with the amended rule may lead to substantial and ongoing costs that the Agencies would need to consider in their evaluation. A robust assessment would include an attempt to quantify those costs as usually done by the SEC in its Paperwork Reduction Act analyses.

- 62. If the Agencies assume that market participants currently paying to use a proprietary identifier such as CUSIP could instead use FIGI for free, any potential cost savings are currently unsubstantiated in the proposed rulemaking. The Agencies should seek to learn from market participants about the extent of such cost savings, or whether total costs instead could increase when requiring the adoption of FIGI for reporting purposes. This would be the case if market participants would still need the proprietary identifiers for other reasons and thus would be faced with the compliance burden of updating their systems to map on FIGI as an additional identifier 108 or would need to pay for additional information or services of a third-party vendor.109
- 63. Robust feedback from market participants is a crucial input to rigorous economic analysis in the rulemaking process, as it can inform the Agencies of the potential costs. Such feedback may include information about why only a few market participants have chosen to report optional FIGIs in Form 13F reports.¹¹⁰ Along these lines, it is worth noting that the costs of a rule can be much higher than originally envisioned by regulators. For example, when proposing amendments to the regulations implementing Section 13 of the BHC Act, the OCC, Board, FDIC, CFTC, and SEC stated that "[c]ertain aspects of the implementing regulations may have resulted in a complex and costly compliance regime that is unduly restrictive and burdensome on some affected banking entities."111 Furthermore, in relation to

¹⁰⁶ I note that only few market participants have chosen to report optional FIGIs in Form 13F reports. See Form 13F Analysis.

¹⁰⁷ For example, I find that 8,069 different institutional managers (identified by unique CIK numbers) have filed a Form 13F report between January 2023 and August 2024. Furthermore, there are 3,379 SEC-registered broker-dealers (also identified by unique CIK numbers) as of October 2024. See SEC Form 13F Data Sets available at https://www.sec.gov/dataresearch/sec-markets-data/form-13f-data-sets; SEC Company Information About Active Broker-Dealers available at https://www.sec.gov/foia-services/frequently-requested-documents/company-information-about-active-broker-dealers. ¹⁰⁸ See Section IV.C.1.

¹⁰⁹ See Section IV.C.2.

¹¹⁰ See e.g., Form 13F Analysis.

¹¹¹ Release No. BHCA-8; File No. S7-02-20, p. 143.

the implementation of Section 404 of the Sarbanes-Oxley act, former director of the SEC's Division of Corporation Finance, Alan L. Beller, mentioned the "unexpectedly high costs of compliance with the internal control assessment, reporting and audit requirements."¹¹²

V. Conclusions

- 64. Overall, the Proposed Rule lacks an analysis of its likely economic consequences and the extent to which the proposed adoption of FIGI as the common identifier for financial instruments would address any market failure or inefficiency in regulatory reporting. The Proposed Rule does not include any analysis of the baseline or the Proposed Rule's likely economic consequences but instead defers to the stage of Agency-specific rulemaking that would follow the adoption of the Proposed Rule. However, if adopted as proposed, the Proposed Rule would likely establish the joint data standards as the new economic baseline that the Agencies would use in conducting their own respective feasibility analyses. In so doing, the impact on the market would likely not be fully analyzed. Individual Agencies would concentrate on any deviations from the proposed joint data standards rather than analyzing the economic impacts of transitioning from current, widely used identifiers to those specified in the new standards. As a result, cost assessments would be narrowly focused on the compliance costs associated with amending specific rules, rather than considering the broader implications for the interoperability of the financial market ecosystem.
- 65. The rulemaking process would benefit from thorough economic analysis by the Agencies, especially at this stage when the joint data standards are being proposed. This analysis should examine the various information collections affected by the Proposed Rule, the identifiers currently used in those collections, and the extent to which those identifiers do not currently meet regulatory reporting needs, to demonstrate the anticipated benefits of any finalized specific data standards and whether those benefits justify the expected costs. In addition, while rigorous economic analysis can still be conducted if dollar estimates are unavailable—it can rely on data analysis or fundamental economic principles to inform and justify the adoption of proposed data standards, even when precise monetary costs or benefits

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¹¹² Speech by SEC Staff' Remarks before the Practising Law Institute Fifth Annual Institute on Securities Regulation in Europe, Alan L. Beller, Director, Division of Corporation Finance, December 5, 2005, available at http://www.sec.gov/news/speech/spch120505alb.htm. For the SEC's regulatory history of Section 404 of the Sarbanes-Oxley Act from 2003 to 2008 see Appendix A of "Study of the Sarbanes-Oxley Act of 2002 Section 404 Internal Control over Financial Reporting Requirements," SEC Office of Economic Analysis, September 2009.

cannot be calculated—it should explain why quantification is impractical and what assumptions were made. Finally, the economic analysis should discuss reasonable alternatives and why the Agencies chose the current rulemaking versus other possibilities.

Analysis of Voluntarily Reported Financial Instrument Global Identifiers (FIGIs) in SEC Form 13F Filings

Craig M. Lewis, Ph.D.¹ October 10, 2024

I. Introduction

- 1. On August 22, 2024, nine federal agencies published the proposed Financial Data Transparency Act ("FDTA") Joint Data Standards rule in the Federal Register.² Among other things, the agencies propose to implement the Financial Instrument Global Identifier ("FIGI") as the common identifier for financial instruments for reporting purposes.³
- 2. The FIGI was originally developed by Bloomberg and based on a methodology known as Bloomberg Open Symbology, a system designed to identify financial instruments across all global asset classes.⁴ Formerly known as the Bloomberg Global ID, the specification was adopted in 2014 by the non-profit consortium Object Management Group and was renamed FIGI.⁵ The FIGI was designed to provide identifiers for multiple purposes, not just for providing a unique common identifier at the asset level. For example, for equity instruments and equity options, FIGI provides identifiers designed for identifying trading activity in a particular region or on a particular venue.⁶ This functionality is useful for market participants who want to track variables such as prices or trading volumes with reference to a particular geographical region or trading venue. Thus, a single security may be allocated many different FIGIs defined at different levels, such as at the Trading Venue level (e.g.,

¹ I am the Madison S. Wigginton Professor of Finance and Professor of Law at Vanderbilt University. From June 2011 to May 2014, I was Chief Economist and Director of the Division of Economic and Risk Analysis at the U.S. Securities and Exchange Commission. The American Bankers Association has provided funding for this project.

² Financial Data Transparency Act Joint Data Standards, Federal Register, 89(163), August 22, 2024 ("Proposed Rule"), pp. 67890–67908. The agencies involved in the joint rulemaking are the Department of the Treasury, the Office of the Comptroller of the Currency, the Board of Governors of the Federal Reserve System, the Federal Deposit Insurance Corporation, the National Credit Union Administration, the Consumer Financial Protection Bureau, the Federal Housing Finance Agency, the Commodity Futures Trading Commission, and the Securities and Exchange Commission ("SEC").

³ Proposed Rule, p. 67897.

⁴ "What's in a name? The Bloomberg Global ID is reborn as the FIGI," *Bloomberg Press Announcement*, October 9, 2014. The FIGI "covers financial instruments globally and across asset classes, including, but not limited to, common stock, derivatives, corporate and government bonds, as well as those that previously lacked standard identifiers, such as crypto assets and loans." Allocation Rules for the Financial Instrument Global Identifier (FIGI) Standard, Version 29.9, July 2022 ("FIGI Allocation Rules"), p. 3.

⁵ "What's in a name? The Bloomberg Global ID is reborn as the FIGI," *Bloomberg Press Announcement*, October 9, 2014. ⁶ FIGI Allocation Rules, pp. 5, 6. Other assets, such as U.S. Treasury instruments, will only be assigned a single FIGI. See e.g., FIGI Allocation Rules, p. 8.

Microsoft common stock traded on the NYSE), at the Composite level (e.g., Microsoft common stock traded in the U.S.), which "enables users to link multiple FIGIs at the Trading Venue-level within the same country or market in order to obtain an aggregated view for that instrument," or at the Share Class level (e.g., Microsoft common stock), which "enables users to link multiple Composite FIGIs for the same instrument in order to obtain an aggregated view for that instrument across all countries globally." Although these different FIGIs ultimately refer to the same security, they refer to the security in a specific context.

- 3. Therefore, market participants who use FIGIs for trading or other purposes may use different FIGIs to refer to the same security, depending on the context. Given this fact, CUSIP Global Services has raised the concern that adopting FIGI as a common identifier for purposes of regulatory reporting might lead to confusion and inconsistent reporting that could undermine the quality and usefulness of the data collected by regulators.⁸ Others instead have argued that this aspect of FIGI is "a carefully developed feature, not a bug" which "allows FIGI to provide data at the common share class level like [CUSIP], but also gives access to additional granular information."
- 4. Institutional investment managers are required to file SEC Form 13F if they manage at least \$100 million in "eligible" equity securities. This form, submitted at the end of each quarter, reports the managers' holdings to the SEC, as required by Section 13(f) of the Securities Exchange Act of 1934. Form 13F already mandates the use of the CUSIP. In June 2022, the SEC amended Form 13F to include the option of reporting a security's FIGI alongside its CUSIP. The use of the amended form started on January 3, 2023. If a filer chooses to report a FIGI, a security's Share Class level FIGI is required. The security is share Class level FIGI is required.
- 5. In this research report, I review Form 13F data between January 2023 and August 2024 ("Sample Period") and provide a preliminary analysis of the institutional managers that report optional FIGIs. Overall, I find that only 13.5% of institutional managers have included a FIGI at some point during the Sample Period when reporting their holdings to the SEC. Holdings reported with a FIGI correspond to 7.8% of total security-level records and 8.3% of

⁸ "CUSIP Global Services Statement on Proposed Data Standards for the Financial Data Transparency Act," CUSIP Global Services, August 1, 2024.

⁷ FIGI Allocation Rules, p. 5.

⁹ "Feature, not a bug': Bloomberg makes the case for the FIGI," *Bloomberg*, September 9, 2024.

¹⁰ See "Frequently Asked Questions About Form 13F," SEC, May 25, 2023. The SEC makes available a list of eligible securities on their website. See https://www.sec.gov/divisions/investment/13flists.

¹¹ See "Frequently Asked Questions About Form 13F," SEC, May 25, 2023.

¹² See SEC Release No. 34-95148, pp. 6–7. "In addition, we are adopting amendments to Form 13F:...(ii) in response to comments received, allow managers to disclose, for any security reported on Form 13F, the security's share class level FIGI in addition to the security's [CUSIP] number."

the total value of reported holdings. I find that 59.6% of all reported unique FIGIs do not appear to be Share Class level FIGIs, representing 44.1% of the total value of holdings reported with a FIGI. This suggests that the adoption of FIGI reporting in Form 13F filings has been rather slow and that a large share of holdings with an optional FIGI has been reported inconsistently.

II. SEC Form 13F Datasets and OpenFIGI Data

- 6. Data reported to the SEC on Form 13F are consolidated and made available to the public on the SEC's website. The statistics discussed in this research report are based on Form 13F reports that have been filed between January 2023 (when the updated form with the optional FIGI field was introduced) to August 2024 (the "Form 13F Data"). No additional filters have been applied to the Form 13F Data, which has been analyzed "as filed." Securities reported in the Form 13F Data are identified by issuer name and CUSIP, and the market value of holdings is reported in dollars. The form includes an optional field to report the Share Class level FIGI that corresponds to the reported CUSIP. The Form 13F Data includes 53,874 filings by 8,069 different institutional managers and contains a total of 51,535 unique securities (identified by distinct CUSIPs). For those managers that also report FIGIs, there are 12,986 distinct CUSIPs, of which 10,916 have been reported with a FIGI, and 21,413 unique FIGIs. Rather than a one-to-one matching, on average, there are 2.0 FIGIs per CUSIP. The point of the public properties of
- 7. Additional information for all FIGIs in the Form 13F Data is sourced from OpenFIGI.¹⁵ These additional data allow one to identify whether a certain FIGI is a Share Class, Composite, or Trading Venue level FIGI, or a FIGI associated with another asset class. The type of a FIGI is an important aspect of this analysis because SEC Form 13F requires that if a FIGI is reported when filing Form 13F, it should be "the security's share class level FIGI."¹⁶

¹³ The Form 13F Datasets are available at https://www.sec.gov/data-research/sec-markets-data/form-13f-data-sets.

¹⁴ Calculated as 21,413 unique FIGIs divided by 10,916 unique CUSIPs that have been reported with a FIGI.

¹⁵ OpenFIGI acts as an "entry point to multiple tools for identifying, mapping and requesting a free Financial Instrument Global Identifier (FIGI)." See https://www.openfigi.com/, accessed on October 3, 2024.

¹⁶ See SEC Release No. 34-95148, p. 7.

III. Results

A. Share of Institutional Managers that Report FIGIs

- 8. I find that since January 2023, 13.5% of institutional managers that filed a Form 13F reported holdings with a FIGI at least one time over the Sample Period. As shown in Figure 1, this share does not fluctuate significantly over time, indicating that the uptake of FIGI reporting has been relatively stable since the introduction of the optional FIGI field in early 2023.
- 9. None of the largest ten institutional managers, as measured by the average size of holdings reported in Form 13F filings, included a FIGI in their filings. By contrast, 12.0% of the fifty largest managers report FIGIs, which is close to the sample average. Among the smallest 1,000 institutional managers, only 4.3% included a FIGI in their Form 13F filings, and this figure drops to less than 1% for the smallest 500 filers. This suggests that smaller institutional managers, in particular, are less likely to include optional FIGIs in their Form 13F filings.
- 10. During the Sample Period, 10.7% of all Form 13F filings included at least one FIGI, and 7.8% of all security-level records were reported with a FIGI, corresponding to \$28 trillion (or 8.3%) of the value of all reported holdings.

B. Securities Reported with Multiple FIGIs

- 11. As discussed above, the fact that a single security can have multiple different FIGIs is central to the current debate about the proposal to adopt FIGI as the common identifier for financial instruments. Since the SEC specifies that the FIGI should be at the security's Share Class level, one would expect to observe a single FIGI for each CUSIP in the Form 13F Data.¹⁷
- 12. Contrary to this prediction, I find that of the 10,916 securities that have been reported with a FIGI, more than half (i.e., 5,818) have more than one FIGI. Moreover, 1,226 securities have been reported with five or more distinct FIGIs.
- 13. I also find that holdings of securities that have been reported with multiple FIGIs tend to be securities that have large aggregate dollar holdings. For instance, 85.6% of the value of

¹⁷ Abstracting from potentially different treatments of corporate actions under the CUSIP and FIGI standard, which may not lead to a one-to-one mapping over time.

holdings that have been reported with a FIGI are linked to securities that were reported with at least five different FIGIs. In contrast, securities consistently reported with only one FIGI account for just 1.3% of the total value of holdings reported with a FIGI.

14. Table 1 lists the securities where institutional investors reported 12 or more distinct FIGIs in their 13F filings. This list contains some of the largest U.S. stocks by market capitalization, such as Amazon, Alphabet (Google), Microsoft, and NVIDIA.¹⁸ For example, the SPDR S&P 500 Trust ETF, a popular ETF with over \$580 billion in assets under management,¹⁹ is linked with 29 distinct FIGIs (see Table 2). Those include the relevant Share Class level FIGI, but also the U.S. Composite and three Trading Venue level FIGIs. Furthermore, 21 FIGIs identify option securities, whereas two FIGIs identify unrelated instruments.²⁰ One FIGI cannot be identified in the OpenFIGI database.

C. Non-Share Class FIGIs Reported in the Form 13F Data

- 15. Using the information obtained from OpenFIGI, I find that 59.6% of the unique FIGIs that are present in the Form 13F Data are not identified as Share Class level FIGIs, corresponding to 21.1% of the security-level records and 44.1% of the value of holdings that were reported with a FIGI.²¹ As shown in Figure 2, the percentage share of unique FIGIs that are not identified as Share Class level FIGIs increases slightly between Q1 and Q2 2023, but does not change significantly during the subsequent quarters. This indicates that the reporting quality has not improved since January 2023.
- 16. Analyzing the non-Share Class level FIGIs included in the Form 13F Data, I find that the majority (i.e., 30.6% of all unique FIGIs) are identified as Composite level FIGIs, corresponding to 18.0% of the security-level records and 42.1% of the value of holdings reported with a FIGI.
- 17. Additionally, 15.8% of all unique FIGIs are identified as neither Share Class nor Composite level FIGIs, but as another type of FIGI, such as a Trading Venue level FIGI or a

¹⁸ See e.g., "Largest Companies By Market Cap," *Investing.com*, available at https://www.investing.com/academy/stock-picks/largest-market-cap-companies/, accessed on October 3, 2024.

¹⁹ See "SPDR S&P 500 ETF Trust," *State Street Global Advisors*, available at https://www.ssga.com/us/en/intermediary/etfs/spdr-sp-500-etf-trust-spy, accessed on October 3, 2024.

²⁰ I manually reviewed the names reported alongside the two FIGIs that identify instruments unrelated to the SPDR S&P 500 Trust ETF and find that the names align with the reported CUSIP. Nevertheless, it could be that both CUSIP and name have been reported incorrectly but that the FIGIs identify the correct instruments held by the filer (however, I note that none of the FIGIs is a Share Class level FIGI). Regardless of the source of the error, the finding demonstrates that the Form 13F Data is not error-free.

²¹ Sub-setting the dataset to securities identified as common stock using Refinitiv Eikon, I find that those figures increase slightly to 65.7% of unique FIGIs, 24.8% of security-level records, and 47.9% of the value of holdings.

FIGI for options (as discussed previously with FIGIs reported for the SPDR S&P 500 Trust ETF). The remaining 13.2% of all unique entries in the FIGI field are invalid FIGIs, reflecting apparent data entry errors. Finally, more than 660 unique entries are formatted like 12-character ISINs, which the investment managers may have confused with 12-character FIGIs.²²

18. While a detailed analysis of potential reasons for the inconsistent reporting of FIGIs in the Form 13F Data is not the focus of this research report, one aspect that may lead to confusion are corporate actions. For example, I find that the common stock for Linde PLC has been reported with eleven different FIGIs (see Table 3). In March 2023, Linde PLC completed an intercompany reorganization that involved the creation of a new holding company.²³ I find that the CUSIP for the new Linde PLC holding company (G54950103) is reported alongside the corresponding Share Class level FIGI, but also together with the Share Class level FIGI for the old Linde PLC stock before reorganization (in addition to other FIGIs).

IV. Conclusion

19. My preliminary analysis of FIGIs reported in Form 13F filings during the Sample Period indicates that the uptake of FIGI reporting has been rather slow and that a large share of holdings with an optional FIGI has been reported inconsistently. This suggests that the design of the FIGI system, because it employs many different identifiers corresponding to the same security, is prone to confusion when used for position reporting. Form 13F Data are made available to the public just as they are submitted, without the SEC correcting errors.²⁴ Academic researchers have documented that some errors and inconsistencies have long existed in the 13F data.²⁵ Introducing an additional field may introduce additional possibilities for errors and inconsistencies. In this case, it appears that the fact that market

²² While FIGIs always begin with either "BBG" or "KKG", those entries begin with country level codes used for ISINs. See FIGI Allocation Rules, pp. 2, 13; "Identifiers," *The Association of National Numbering Agencies*, available at https://annaweb.org/identifiers/, accessed on October 3, 2024.

²³ See "Linde Prepares for Last Day of Trading on Frankfurt Stock Exchange," *Linde PLC Press Release*, February 23, 2023.
²⁴ See https://www.sec.gov/data-research/sec-markets-data/form-13f-data-sets ("The data is presented without change from the "as-filed" submissions.... The Form 13F data sets contain information derived exclusively from structured data filed with the Commission by individual filers as well as Commission-generated filing identifiers. Because the data is derived from information provided by individual filers, we cannot guarantee the accuracy of the data sets.")

²⁵ See e.g., Anne Anderson and Paul Brockman (2018), "An Examination of 13F Filings," *The Journal of Financial Research*, 41(3), pp. 295–324. Analyzing a sample of Form 13F filings, the authors find that "(1) reported security holdings do not always match the U.S. Securities and Exchange Commission's Official List, (2) market valuations of Official List securities can be inaccurate, and (3) amended 13F reports can be even less accurate than the original reports."

participants use different FIGIs to refer to the same security in different contexts has led to inconsistencies and confusion in the reporting process.

Securities Reported with the Highest Number of Different FIGIs

Number of Different FIGIs Used in Form 13F Filings

Security Name	CUSIP	Correct Share Class Level FIGI ^[1]	Other
SPDR S&P 500 ETF TRUST	78462F103	1	28
Alphabet Inc., Class A	02079K305	1	13
Amazon.com Inc., Common Stock	023135106	1	13
Microsoft Corp., Common Stock	594918104	1	13
Apple Inc., Common Stock	037833100	1	11
Bank of America Corp., Common Stock	060505104	1	11
Johnson & Johnson., Common Stock	478160104	1	11
NVIDIA Corp., Common Stock	67066G104	1	11
PepsiCo Inc., Common Stock	713448108	1	11
Union Pacific Corp., Common Stock	907818108	1	11
Walmart Inc., Common Stock	931142103	1	11
iShares Russell 2000 ETF	464287655	1	11
VanEck Vectors Gold Miners ETF	92189F106	1	11

Source: Form 13F Data

Note:

[1] Share Class level FIGIs that correspond to the relevant CUSIP.

Appendix 1 Table 2

Form 13-F Reporting for SPDR S&P 500 ETF

CUSIP	FIGI	FIGI Classification	Number of Security-Level Records with this Combination	Value (\$Billion) of Holdings Reported with this Combination
Correct Share Class	Level FIGI			
78462F103	BBG001S72SM3	Share Class for SPDR S&P 500 ETF TRUST	3,300	111.8
Other FIGIs				
78462F103	BBG000BDTBL9	U.S. Composite for SPDR S&P 500 ETF TRUST	230	50.4
78462F103	BBG000BDTF76	SPDR S&P 500 ETF TRUST Traded on New York Stock Exchange ARCA	13	0.8
78462F103	BBG002J563P3	SPDR S&P 500 ETF TRUST Traded on Bolsa de Valores de Lima	7	0.3
78462F103	BBG000BDTDK6	SPDR S&P 500 ETF TRUST Traded on New York Stock Exchange	7	0.1
78462F103	BBG001GR6450	No match on OpenFIGI	6	6.4
78462F103	BBG01JL8CWW7	U.S. Composite for option SPY 02/16/24 P410	3	<0.1
78462F103	BBG019PD35Z0	NEXTERA ENERGY INC 6.926% Equity Units	2	<0.1
78462F103	BBG01JL8CQ96	U.S. Composite for option SPY 02/16/24 P405	1	2.7
78462F103	BBG01K8KFHX1	U.S. Composite for option SPY 04/19/24 P445	1	2.2
78462F103	BBG01FFKCLF8	U.S. Composite for option SPY 08/18/23 P415	1	1.1
78462F103	BBG01N41HRB1	U.S. Composite for option SPY 11/15/24 P520	1	1.0
78462F103	BBG01L5MT7K9	U.S. Composite for option SPY 08/16/24 P480	1	0.5
78462F103	BBG01CBHS0W6	U.S. Composite for option SPY 07/21/23 P390	1	0.5
78462F103	BBG01DVFS0Y4	U.S. Composite for option SPY 03/15/24 P430	1	0.5
78462F103	BBG01L5MV058	U.S. Composite for option SPY 08/16/24 P500	1	0.3
78462F103	BBG00XB9H6R4	U.S. Composite for option SPY 01/20/23 P360	1	0.2
78462F103	BBG000Q5QG14	U.S. Composite for SCHWAB EMRG MRKTS EQTY ETF	1	<0.1
78462F103	BBG0146GMNW8	U.S. Composite for option SPY 12/20/24 P500	1	<0.1
78462F103	BBG011NT0GJ1	U.S. Composite for option SPY 06/16/23 P395	1	<0.1
78462F103	BBG01FQ827C8	U.S. Composite for option SPY 10/20/23 P425	1	<0.1
78462F103	BBG01GYRDPG9	U.S. Composite for option SPY 09/20/24 P520	1	<0.1
78462F103	BBG01FZ8BH54	U.S. Composite for option SPY 09/15/23 P433	1	<0.1
78462F103	BBG011NT0FD9	U.S. Composite for option SPY 06/16/23 P385	1	<0.1
78462F103	BBG0183SJ3N4	U.S. Composite for option SPY 09/15/23 P425	1	<0.1
78462F103	BBG01CBHS6G1	U.S. Composite for option SPY 07/21/23 P415	1	<0.1
78462F103	BBG01FFKBPR7	U.S. Composite for option SPY 08/18/23 P390	1	<0.1
78462F103	BBG01CBHS1Z1	U.S. Composite for option SPY 07/21/23 P395	1	<0.1
78462F103	BBG01HGR59L6	U.S. Composite for option SPY 09/29/23 P424	1	<0.1

Source: Form 13F Data

Form 13-F Reporting for LINDE PLC Common Stock

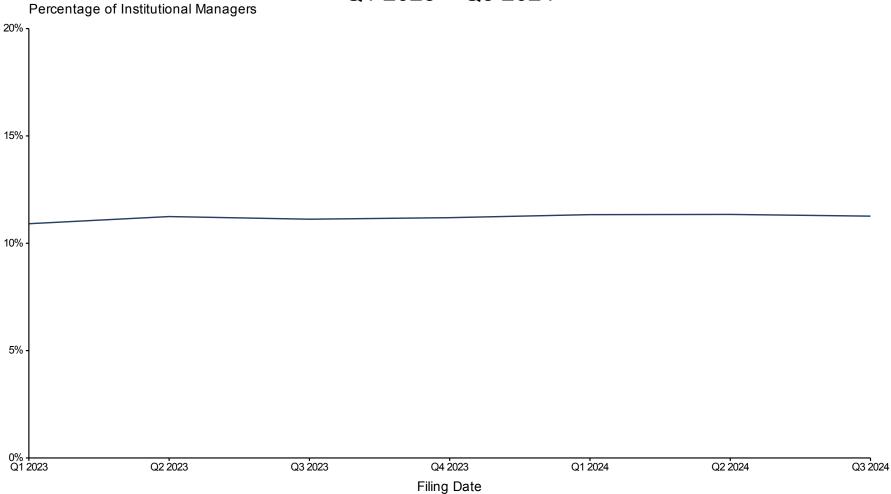
CUSIP	FIGI	FIGI Classification	Number of Security-Level Records with this Combination	Value (\$Billion) of Holdings Reported with this Combination
Correct Share Class				
G54950103	BBG01FND0CH6	Share Class for LINDE PLC	1,371	33.2
Other FIGIs				
G54950103	BBG01FND0CC1	U.S. Composite for LINDE PLC	205	32.0
G54950103	BBG00GVR8YQ9	No match on OpenFIGI	54	27.0
G54950103	BBG01FNDGN76	LINDE PLC Traded on New York Stock Exchange	10	0.1
G54950103	BBG01FNDGNN8	LINDE PLC Traded on Nasdaq	9	0.1
G54950103	BBG019PD35Z0	NEXTERA ENERGY INC 6.926% Equity Units	6	0.2
G54950103	BBG000BNDN65	U.S. Composite for LOWE'S COS INC	2	<0.1
G54950103	BBG000C5HS04	U.S. Composite for NIKE INC	2	<0.1
G54950103	BBG000CH5208	U.S. Composite for UNITEDHEALTH GROUP INC	1	<0.1
G54950103	BBG00GVR8YR8	Share Class for LINDE PLC/OLD	1	<0.1
G54950103	BBG01FP3QZQ7	German Composite for LINDE PLC	1	<0.1

Source: Form 13F Data

Appendix 1 Figure 1

FIGI Reporting by Institutional Managers by Quarter

Q1 2023 - Q3 2024



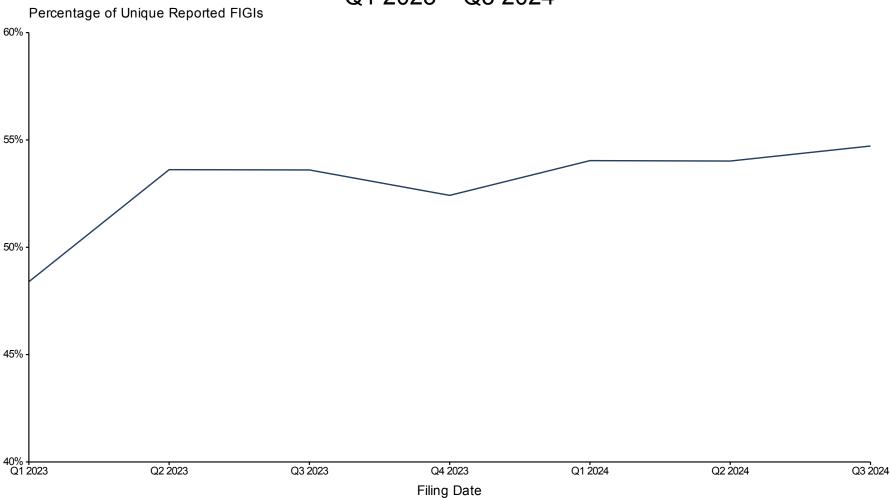
Source: Form 13F Data

Note: This chart displays the percentage of institutional managers that include at least one FIGI when filing their SEC Form 13F. Q3 2024 only includes data for July and August.

Appendix 1 Figure 2

Non-Share Class Level FIGIs Reported in Form 13F Filings by Quarter

Q1 2023 - Q3 2024



Source: Form 13F Data

Note: This chart displays the percentage share of unique FIGIs reported in the Form 13F Data that were non-Share Class level FIGIs. Q3 2024 only includes data for July and August.